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Insurance Information Institute

THE FACT BOOK

1990 Property/ Casualty Insurance Facts

Property/Casualty Insurance at a Glance

The property/casualty insurance business early in 1989 comprised about 3,800 individual companies which operate in a highly competitive environment. Although about 900 of those companies write most of the business, no single company or group has more than 10 percent of the market, and the 10 largest companies account for less than 40 percent of the market.

In 1988, property/casualty insurance companies employed some 549,900 persons, according to government statistics. An additional 623,500 persons were engaged in agency or brokerage operations and insurance service organizations on behalf of the insurance industry as a whole, including the property/casualty, life and accident, and health segments.

OPERATING RESULTS, PROPERTY/CASUALTY INSURERS, 1986-1988

	1988 ($1,000)	1987 ($1,000)	1986 ($1,000)	% change 1987–88	% change 1986–87
Assets	$476,929,318	$426,710,547	$374,088,083	+11.8%	+14.1%
Net premiums written	202,014,698	193,245,779	176,552,070	+ 4.5	+ 9.5
Premiums earned	199,978,326	188,989,175	166,381,186	+ 5.8	+13.6
Losses and adjustment expenses incurred	156,696,193	147,379,897	135,765,622	+ 6.3	+ 8.6
Loss and loss adjustment ratio	78.35%	77.98%	81.60%	+ 0.5	– 4.4
Underwriting expenses incurred	51,942,721	49,045,206	44,542,343	+ 5.9	+10.1
Underwriting expense ratio	25.71%	25.37%	25.23%	+ 1.3	+ 0.6
Combined ratio (before dividends to policyholders)	104.06%	103.35%	106.83%	+ 0.7	– 3.3
Combined ratio (after dividends to policyholders)	105.45%	104.69%	108.13%	+ 0.7	– 3.2
Statutory underwriting gain (loss)	(8,391,819)	(7,078,243)	(13,747,925)	+18.6	–48.5
Dividends to policyholders	2,775,958	2,546,258	2,164,969	+ 9.0	+17.6
Net underwriting gain (loss)	(11,167,777)	(9,624,501)	(15,912,894)	+16.0	–39.5
Net investment income	27,723,269	23,959,981	21,924,445	+15.7	+ 9.3
Operating earnings after taxes	12,888,726	10,988,400	6,610,383	+17.3	+66.2
Policyholders' surplus	118,194,802	103,996,200	94,288,390	+13.7	+10.3
Premium to surplus ratio	1.71 to 1	1.86 to 1	1.87 to 1		
Dividends to stockholders	4,852,941	4,364,202	2,806,818	+11.2	+55.5

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

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THE FACT BOOK

1990 Property/ Casualty Insurance Facts

To the Reader

Without proper order and form, the value and importance of figures are lost. Put in a usable, convenient, easy-to-read format, however, facts provide us a means to compare events in one time frame with another, a device to measure like items, incidents, results.

Insurance Facts does just this—it compiles and arranges some of the millions of statistics pertaining to the property/casualty insurance industry. In this one book you can find out how much property/casualty insurers paid in premium taxes last year, state by state; the most costly fires in the United States last year and in the past; the status of the seat belt law in each state... These are just a few of the facts you can find in this handy book.

Insurance Facts is published annually by the Insurance Information Institute, an educational, fact-finding, and communications organization, supported by some 300 property/casualty insurance companies. The Institute also provides public relations services to other organizations in the fields of property, liability, fidelity, surety, and marine insurance.

We are grateful for the cooperation and assistance of other insurance organizations, government agencies, and commercial publishers of data in getting all these figures together. We particularly thank A.M. Best Company, Inc., the National Fire Protection Association, the National Safety Council, and the Insurance Institute for Highway Safety and the Highway Loss Data Institute.

Thank you for your interest in *Insurance Facts*.

Mechlin D. Moore, President
Insurance Information Institute

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Scope of the Business

Overview of Insurance

The business of insurance in the United States is divided into three broad categories: life insurance, health insurance, and property and casualty insurance. Altogether it provides more than 2 million jobs and has responsibility for assets which at the end of 1988 totaled nearly $1.6 trillion. But its greatest significance in the American economy is its role as the absorber of personal and business risks.

The property/casualty segment of the insurance business is responsible for assets which, at the close of 1988, totaled more than $476.9 billion. It provides hundreds of forms of financial protection against virtually every peril.

Data compiled by the U.S. Bureau of Labor Statistics (BLS) show that property/casualty insurance companies employed some 549,900 persons in 1988. BLS estimates that another 623,500 persons were engaged in agency or brokerage operations and insurance service organizations, but does not distinguish between personnel employed in the life or health insurance business and those in the property and casualty field.

As of 1988, there were more than 6,000 insurance companies based in the United States and operating under the supervision of regulatory authorities in the various states. Some of these companies sell all lines of insurance; many specialize in one or more fields. Some 3,800 of those companies sell some form of property and casualty insurance, and related lines, including inland marine coverages and surety and fidelity bonds. A vast majority of the property/casualty business is written by about 900 companies that operate in all or most states.

The property and casualty insurance business plays a major role in keeping the American economy moving. Insurance coverages backstop the extensive commercial and consumer credit system of the nation. Further, surety bonds are required on almost all public works and commercial construction, to protect against loss in the event a contractor fails to fulfill a contract.

In large part because of insurance coverage, Americans — business owners and employees, home owners, and car owners — have more financial protection and a greater sense of security than any people anywhere have ever enjoyed in the history of the world.

Property/Casualty Insurance in 1988–1989: A Review

The property/casualty insurance industry's earnings continued to improve in 1988. Consolidated net income after taxes totaled $15.6 billion, up 8.3 percent from 1987's $14.4 billion.

The net income comprised $16.5 billion of pre-tax operating income and $2.7 billion of net realized capital gains, offset by income taxes of $3.6 billion.

PROFIT (LOSS) IN THE PROPERTY/CASUALTY INSURANCE BUSINESS, 1988

($ billions)

Earned premiums	$200.0
Incurred loss (including loss adjustment expense)	−156.7
Underwriting expenses	− 51.9
Policyholder dividends and other minor items	− 2.6
Underwriting loss	(11.2)
Investment income (dividends and interest)	+ 27.7
Operating gain	16.5
Realized capital gains	+ 2.7
Income taxes	3.6
Net after-tax income	$ 15.6

With policyholders' surplus at $118.2 billion at the end of 1988, the rate of return for the industry remained at 13.2 percent, unchanged from 1987. Policyholders' surplus, the capital that provides protection against unexpected or catastrophic losses, rose by 13.7 percent in 1988 compared with 10.3 percent in 1987.

The slight decline in the industry's profit growth rate reflected several changes from the previous year. Revenues earned from premiums increased by only 5.8 percent over those of 1987, while losses plus expenses rose 6.2 percent. The result was an underwriting loss 16.0 percent higher than in 1987.

The key element in the profit equation was investment income, the interest and dividends earned from assets, which increased by 15.7 percent, compared to an increase of only 9.3 percent in 1987.

The industry's combined ratio (after dividends to policyholders) was 105.4 in 1988, a slight drop from the 104.7 ratio of 1987.

The favorable operating results since 1986, achieved in spite of continuing underwriting losses, suggest that the industry has recovered from the financial morass of 1984 and 1985, which produced record underwriting losses and a record number of company insolvencies (41 during the two-year period). The crisis was attributed to increasing costs of litigation and pressures on pricing from intense competition.

(Section continues)

Premium growth again slowed in 1988, reflecting lower rates of increase in insurance prices. Net premiums written increased by 4.5 percent, less than half the increase of 9.5 recorded in 1987.

While the overall operating results of the industry continued to improve in 1988, a number of unusual developments that occurred during the year will likely affect the future of the industry.

Proposition 103

California's voters' initiative, Proposition 103, passed with 51 percent of the vote on November 8, 1988, and was substantially approved by the state Supreme Court on May 4, 1989. However, a key provision was declared unconstitutional.

Under the initiative, property/casualty rates were made subject to approval in advance; territory was reduced in importance in rate setting; the industry's limited exemption from California antitrust law was eliminated; banks were permitted to enter the insurance business; and the position of insurance commissioner was made elective.

The key provision called for most property/casualty insurance rates to be rolled back to 20 percent below what they were on November 8, 1987, unless the insurer could demonstrate to the insurance department that it was "substantially threatened with insolvency." The court, however, ruled that the "insolvency standard" violated due process and declared that insurers were entitled to a "fair and reasonable return."

The decision allowed insurers to file for exemptions on a line-by-line basis and to charge higher rates than originally allowed under Proposition 103. However, if the insurance department later finds premiums to be excessive, it can order insurers to pay refunds with interest. The insurance commissioner has ordered seven companies to refund a total of $305.3 million in premiums.

By the end of August, at least 180 insurance companies had been granted exemptions on the grounds that their return on equity did not exceed 11.2 percent. Other companies will be subject to hearings on their exemption requests.

Implementing the initiative will be costly. State budget increases attributable to the initiative will total nearly $26 million by the end of fiscal year 1989-90, and insurers have to pay a fee of $2,500 for each exemption request.

In early June, Nevada legislators approved a 15 percent rollback in both private and commercial auto liability insurance premiums. The bill used the "insolvency" standard for exemptions and also required that a company prove it faced insolvency in all lines, not just auto liability, in order to gain an exemption. That could mean that buyers of homeowners insurance may end up subsidizing auto insurance buyers. The legislation has been challenged in court.

(Section continues)

Several other states have considered rate-rollback legislation, and South Carolina passed a 5 percent rollback and increased the good-driver discount to 20 percent. These measures were tied to a mandatory seat belt law that was expected to reduce claim costs.

Consumer movements pushing for rate rollbacks and repeal of state antitrust exemptions for insurers are underway in Connecticut, Florida, Illinois, Indiana, Maryland, New Hampshire, New Jersey, New York, Ohio, Oregon, Pennsylvania, West Virginia, and Wisconsin, under the umbrella of Citizen Action, a federation of state consumer organizations.

The Antitrust Issue

In mid-September 1989, U.S. District Court Judge William W. Schwarzer ruled that insurers are immune from federal antitrust suits and dismissed a massive antitrust case brought against the insurance industry by the attorneys general of 19 states. The attorneys general said they would appeal.

The suit began in the spring and summer of 1988 when the attorneys general of Alaska, Arizona, Alabama, California, Colorado, Connecticut, Maryland, Massachusetts, Michigan, Minnesota, Montana, New Jersey, New York, Ohio, Pennsylvania, Washington, West Virginia, and Wisconsin joined in federal antitrust lawsuits against 31 major insurance companies and industry associations. Louisiana joined in the suit in April 1989. Texas filed a similar suit under state law in a Texas district court. In addition, about 20 similar private class-action lawsuits were filed, 18 of which were later joined to the attorneys' general suit in the Northern District of California.

The suits charged that the defendants conspired to create a global boycott of certain types of commercial general liability coverages, particularly coverage for environmental damages stemming from pollution. The charges focused on a very narrow aspect of the overall insurance marketplace—the development of new policy language by the organization authorized to do so, the Insurance Services Office (ISO). The suit alleged that the defendants engaged in a "global conspiracy" to draft restrictive policy language.

The industry pointed out that the policies in question were developed in consultation with customers, regulators, agents, and brokers; that they were the subject of many public hearings; and that they were revised several times before being approved by every state where they were put into use. The industry contended that it was in the position of defending actions that were required and approved by state laws.

Prior to Judge Schwarzer's decision, the industry and state regulators moved to do away with an aspect of the business that raised antitrust questions among some critics. In April 1989, ISO announced that, commencing in 1990, it would no longer provide "advisory rates" to its 1,400 member insurers, but would instead

issue only "advisory average prospective loss costs." Advisory rates include data on loss costs, but also take into account marketing costs, overhead, underwriting profit considerations, and contingencies. Loss costs include only data on prospective claims and the costs of claims handling and legal defense.

In a similar vein, the June 1989 meeting of the National Association of Insurance Commissioners (NAIC) approved a recommendation to bar the distribution of "final rates" by ratemaking organizations in all lines of insurance except workers compensation, which is the subject of a separate NAIC study on rating issues. Final rates, like advisory rates, include provisions for expenses and profits.

Congressional Actions

In 1989, Congress got off to a very slow start on legislative issues of concern to the property/casualty insurance business. Both Congress and the Administration were preoccupied with changes in leadership, the federal budget deficit, and the bailout of the savings and loan industry.

Several items that would have been troublesome to property/casualty insurers were included in early drafts of the 1989 tax package, but these provisions were deleted by the House Ways and Means Committee. Among the ideas the committee rejected were changes in the corporate alternative minimum tax to increase taxes on income from municipal bonds and an income tax on structured settlement payments of liability claims.

Proposals to revise or repeal the McCarran-Ferguson Act were reintroduced in both houses. Both judiciary committees held hearings on the insurance industry's limited exemption from federal antitrust law, but no further action occurred in either house by early autumn.

The House Committee on Energy and Commerce held hearings on the issue of insurance company solvency. Reports prepared by the Congressional Research Service and the committee staff reflected continuing congressional interest in the subject, but no action was taken.

Legislation to create a federal product liability statute, preempting state laws, was introduced again in both houses. Several different proposals were put forward, but there had been no further action on these proposals by early autumn.

Bills aimed at establishing a product liability law specifically for general aviation aircraft proceeded independently of the broader product liability proposals. The Senate Commerce and the House Public Works Committees approved the legislation (identical to previous years' bills) and sent the measures to the respective judiciary committees for further debate.

Legislation authorizing continuation of the National Flood Insurance Program was quickly approved. The House Banking Committee declared its intent, however, to find ways to increase eligible homeowner participation in the program.

Property/Casualty Insurance Companies by State

The property/casualty insurance business in the United States comprised 3,849 individual companies early in 1989, according to information provided by state insurance departments. Although about 900 of these companies write most of the business, no single company or group has more than 10 percent of the market, and the 10 largest companies account for less than 40 percent of the premium volume.

Thirty-one states house 40 or more companies each. The state with the greatest number of company home offices is Texas with 298, followed by Illinois with 295.

PROPERTY/CASUALTY INSURANCE COMPANIES BY STATE, 1988

State	Home offices	State	Home offices
Alabama	31	Montana	15
Alaska	12	Nebraska	78
Arizona	40	Nevada	5
Arkansas	29	New Hampshire	36
California	158	New Jersey	65
Colorado	46	New Mexico	13
Connecticut	65	New York	201
Delaware	108	North Carolina	71
District of Columbia	14	North Dakota	39
Florida	79	Ohio	158
Georgia	58	Oklahoma	57
Hawaii	20	Oregon	19
Idaho	15	Pennsylvania	200
Illinois	295	Rhode Island	23
Indiana	121	South Carolina	32
Iowa	203	South Dakota	50
Kansas	33	Tennessee	52
Kentucky	39	Texas	298
Louisiana	49	Utah	11
Maine	22	Vermont	130
Maryland	41	Virginia	47
Massachusetts	49	Washington	25
Michigan	63	West Virginia	18
Minnesota	179	Wisconsin	191
Mississippi	21	Wyoming	7
Missouri	218		

Source: State Insurance Departments.

Employment in Insurance

Employment in the insurance industry in the United States, which passed the 2 million mark for the first time in 1987, rose about three-tenths of one percent in 1988.

The Bureau of Labor Statistics (BLS) of the Department of Labor estimated employment by property/casualty insurers was up almost 4 percent, and the number of agents, brokers, and service personnel in all segments of the business increased by just over 3 percent during the year. However, the BLS

tallied the number of employees working directly for insurance companies at 1,403,800, a decrease of slightly over 8 percent confined entirely to the life segment of the industry.

The Research Department of the Alliance of American Insurers reported in 1988 that more than half the states have more than 25,000 insurance workers each. The Alliance estimated the industry's payroll at nearly $57 billion in 1988 and anticipated it would reach nearly $63 billion in 1990.

EMPLOYMENT IN INSURANCE, 1979–1988

(Annual averages)

Year	Property/casualty companies	Other companies	Agents, brokers, service personnel	All–industry
1979	467,600	732,200	430,100	1,629,900
1980	477,100	747,000	452.300	1,676,400
1981	478,000	758,460	465,600	1,702,000
1982	478,500	759,300	476,200	1,714,000
1983	469,300	760,000	490,700	1,720,000
1984	467,600	771,700	517,500	1,756,800
1985	474,900	817,000	541,500	1,833,400
1986	499,600	865,700	573,900	1,939,200
1987	528,900	889,300	603,600	2,021,800
1988	549,900	853,900	623,500	2,027,300

Source: Bureau of Labor Statistics, U.S. Department of Labor.

Ownership of Insurance

Some 95 percent of the nation's home owners, but 23 percent of people who rent their homes, carry household insurance to protect themselves against potential financial losses, according to the findings of a national survey conducted by Cambridge Reports, Inc., for the Insurance Information Institute in 1986.

The study found that 69 percent of Americans owned their homes, while only 27 percent were renters.

Since an earlier similar study in 1984, there was a slight increase in the percentage of home owners who carried household insurance, but the percentage of renters who had insurance on their household contents and personal possessions fell about 5 percent.

A demographic focus on renters revealed that economic factors are the dominant element in renter decisions to buy household insurance. College graduates, persons over age 46, and whites who rented were more likely to have household insurance than those who had less than high school educations and were younger than age 46 or black. The common element distinguishing these two statistical groups is income.

Only 8 percent of renters who live in the Northeast have renters insurance. In other areas of the nation, those who have coverage range from 19 percent in the Pacific area to 46 percent in the Midlands.

(Section continues)

INSURANCE COVERAGE REPORTED BY U.S. HOUSEHOLDS

	% of public	Have insurance	Don't have insurance	Not sure
Home Owners				
1986	69%	95%	3%	2%
1984	67	93	4	3
Renters				
1986	27%	23%	69%	8%
1984	29	28	65	8

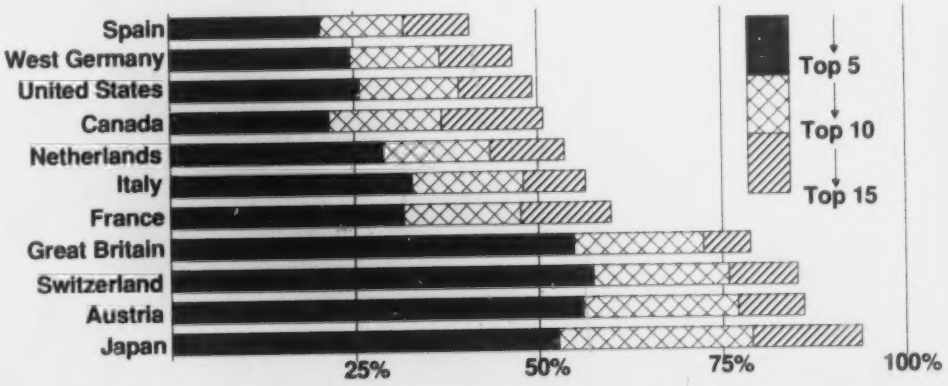
Source: Insurance Information Institute.

Competition and Regulation

The business of property and casualty insurance is subject to two powerful forms of control: intense competition among insurance companies and strict regulation by each state.

The degree of competition in the United States is reflected by the fact that no single company or group has more than a 10 percent share of the property/casualty insurance market. When the United States is compared with other developed countries, it stands out as one of the most competitive markets in the world. A recent study by Swiss Re compared the market shares of the top 15 non-life companies in 11 major countries. The United States was one of only three countries whose top 15 property/casualty insurers did not have a 50 percent market share. In four other countries, the top five companies alone had a 50 percent market share.

MARKET SHARE OF TOP 15 COMPANIES IN 11 COUNTRIES



Businesses essential to the public welfare — banks, utilities, publicly–held companies — are subject to special oversight by public authorities. Property/casualty insurance, so closely linked with the public interest, is closely regulated by the states. Publicly–held insurers are also subject to regulation by the Securities Exchange Commission and other federal agencies.

The basic role of state regulatory authorities is threefold: to monitor the financial condition of each com-

pany and its capacity to pay claims, to ensure that consumers are not overcharged or discriminated against, and to encourage insurers to make essential coverage as readily available as practicable.

Many states require that rates be approved in advance by the regulator. In others, rate changes may usually be made without prior approval. In those states, rates are subject to regulator review to assure that they are not inadequate, excessive, or discriminatory.

Approximately 30 states require prior approval of rates. The remainder do not require such approval and rely on price competition to assure the availability of insurance at costs that are fair, reasonable, and not excessive.

The World Insurance Market

The United States accounted for some 38 percent of the world's premium volume in 1987, according to the Swiss Reinsurance Company.

Swiss Re's annual study includes only countries with premium volumes of at least $100 million.

The world's premium income reached $1.070 trillion in 1987, up almost 25 percent from 1986's $858.5 billion.

However, Swiss Re estimates that, when the figures are adjusted for inflation and exchange rates, actual growth was only 8.5 percent as compared to 17.6 percent in 1986.

The North American (United States and Canada) share of the world insurance market declined again in 1987. The United States still dominated the world market, but Japan strengthened its second-place position, gaining 22.5 percent of the market. As recently as 1984, Japan had only 14.78 percent of the market.

In non-life insurance, world premium volume, when adjusted for inflation and exchange rates, rose only 4.6 percent in 1987. The non-life segment of total business declined to less than 50 percent for the first time. Life insurance premiums climbed 12.8 percent to $545.2 billion.

Switzerland again led the world in premiums per capita at $2,447, with Japan second ($1,975) and the United States third ($1,668).

(Section continues)

THE WORLD'S LEADING INSURANCE COUNTRIES IN 1987

($1 million)

Rank	Country	Non-life premiums	Life premiums	Total premiums	% of total world premiums
1	United States[1]	$241,238	$165,414	$406,652	38.00%
2	Japan[2]	62,725	178,344	241,069	22.53
3	West Germany	44,962	36,391	81,353	7.60
4	Great Britain[3]	23,665	40,155	63,820	5.96
5	France	28,764	21,236	50,000	4.67
6	USSR	13,693	15,522	29,215	2.73
7	Canada	11,810	11,077	22,887	2.14
8	Italy	15,471	4,270	19,741	1.84
9	Switzerland	7,128	8,877	16,005	1.50
10	Netherlands[4]	8,188	7,083	15,271	1.43

(1) Net premiums written. (2) March 31, 1987 to March 31, 1988. (3) Estimated or provisional. (4) Net premiums.

Source: Swiss Reinsurance Company, *Sigma, 3/89.*

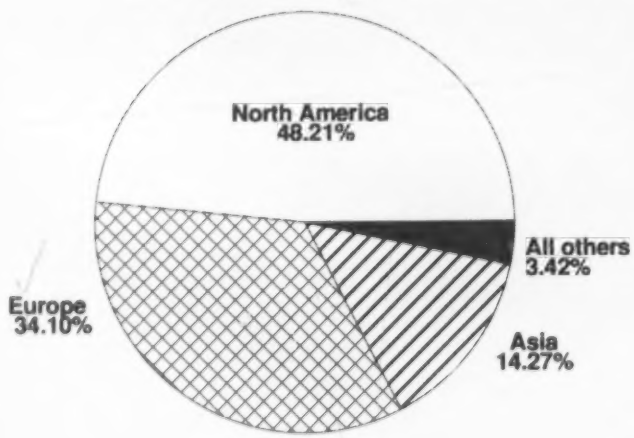
WORLD INSURANCE PREMIUM VOLUME BY CONTINENT, 1987

($1 million)

	Total business		Non-life business		Life business	
	Premium income	World share(%)	Premium income	World share(%)	Premium income	World share(%)
North America	$ 429,539	40.14%	$253,048	48.21%	$176,491	32.37%
Europe	338,636	31.65	179,010	34.10	159,626	29.29
Asia	270,191	25.24	74,924	14.27	195,267	35.81
Oceania	12,894	1.21	8,006	1.53	4,888	0.90
Africa	12,422	1.16	4,804	0.92	7,618	1.39
Cnt. & S. Amer.	6,418	0.60	5,108	0.97	1,310	0.24
World totals	**$1,070,100**	**100.00**	**$524,900**	**100.00**	**$545,200**	**100.00**

Source: Swiss Reinsurance Company, *Sigma*, 3/89.

WORLD MARKET SHARE OF NON-LIFE BUSINESS BY CONTINENT, 1987



Swiss Reinsurance Company, Sigma, May 1989

Dollars and Cents of the Business

Net Premiums Written by Line

Premiums written by insurance companies in the United States for all types of insurance totaled more than $431 billion in 1988. Net premiums written by property and casualty companies totaled more than $202 billion, up only slightly over 1987's total. Accident and health insurance and workers compensation showed the greatest increase in net premium volume.

NET PREMIUMS WRITTEN BY LINE, 1987-1988

	1988	1987	% change
Auto liability, pvt. passenger	$ 40,812,744,000	$ 37,449,134,000	+ 9.0%
Auto liability, commercial	11,707,484,000	11,755,444,000	– 0.4
Total auto liability	52,520,228,000	49,204,578,000	+ 6.7
Auto phys. damage, pvt. pass.	28,676,435,000	26,838,193,000	+ 6.8
Auto physical damage, comm.	5,182,808,000	5,157,198,000	+ 0.5
Total auto phys. damage	33,859,243,000	31,995,391,000	+ 5.8
Total automobile	86,379,471,000	81,199,969,000	+ 6.4
Medical malpractice	4,027,825,000	4,004,185,000	+ 0.6
General liability	19,077,182,000	20,873,777,000	– 8.6
Total non-auto liability	23,105,007,000	24,877,962,000	– 7.1
Fire insurance and allied lines*	6,924,936,000	7,656,406,000	– 9.6
Homeowners multiple peril	17,093,301,000	16,653,011,000	+ 2.6
Farmowners multiple peril	886,161,000	889,752,000	– 0.4
Commercial multiple peril	17,656,728,000	17,230,885,000	+ 2.5
Workers compensation	26,135,309,000	23,428,978,000	+11.6
Inland marine	4,270,747,000	4,119,936,000	+ 3.7
Ocean marine	1,262,859,000	1,354,533,000	– 6.8
Surety and fidelity	2,542,752,000	2,450,228,000	+ 3.8
Financial guaranty	502,996,000	581,785,000	–13.5
Burglary and theft	109,409,000	127,422,000	–14.1

*Crop-hail and earthquake insurance premiums are included in allied lines.

(Table continues)

	1988	1987	% change
Boiler and machinery	$ 626,071,000	$ 595,545,000	+ 5.1
Glass	23,681,000	25,389,000	– 6.7
Aircraft	690,504,000	841,497,000	–17.9
Accident and health	4,699,179,000	3,814,711,000	+23.2
Other lines	9,105,587,000	7,397,770,000	+23.1
Total, all lines	**$202,014,698,000**	**$193,245,779,000**	+ 4.5

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

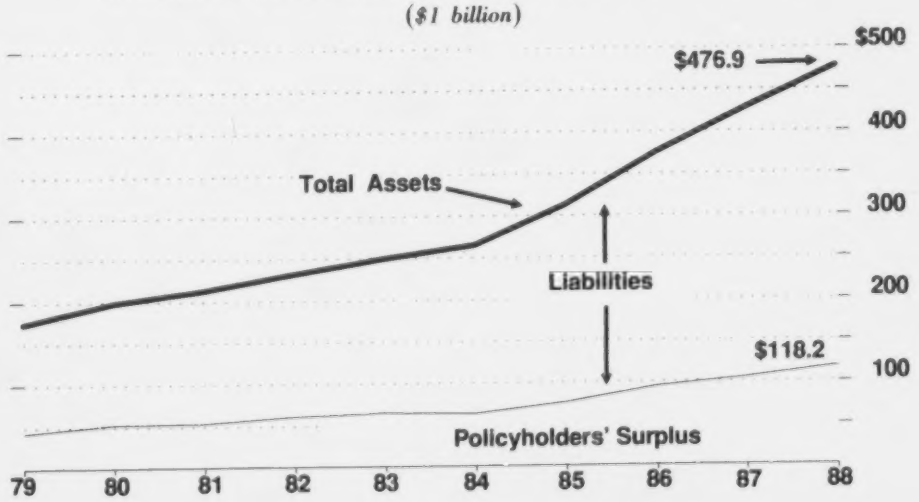
Assets and Policyholders' Surplus

An idea of the strength and reliability of the property and casualty insurance business may be gained from a review of its assets and policyholders' surplus.

Traditionally, assets and policyholders' surplus have been reported in terms of aggregate totals, with the result that industrywide figures have included some duplications because of interownerships within company groups. However, consolidated totals, computed by eliminating interownerships, provide a more accurate picture of the industry's financial position. The graph below, based on the consolidated figures, shows that while both assets and the policyholders' surplus have been climbing steadily, liabilities have been increasing at a greater rate than surplus.

ASSETS & POLICYHOLDERS' SURPLUS, 1979–1988

($1 billion)



In current dollars, policyholders' surplus rose 178 percent between 1979 and 1988, while assets increased by 174 percent in the same period. However, when allowance is made for inflation, the amount of growth over the 10-year period was much smaller with assets increasing by 68 percent and policyholders' surplus by 70 percent.

Most insurance company assets are invested in government, industrial, and utility bonds, and high grade stocks.

CONSOLIDATED ASSETS AND POLICYHOLDERS' SURPLUS, 1979–1988

Year	Assets	Annual % change	Policyholders' surplus	Annual % change
1979	$174,227,967,482	+16.9	$ 42,456,100,830	+20.0
1980	197,660,794,250	+13.4	52,196,380,693	+22.9
1981	212,302,741,594	+ 7.4	53,804,788,612	+ 3.1
1982	231,692,712,528	+ 9.1	60,394,591,263	+12.2
1983	249,121,082,570	+ 7.5	65,605,727,424	+ 8.6
1984	264,734,721,825	+ 6.3	63,809,497,216	- 2.7
1985	311,364,665,175	+17.6	75,511,416,755	+18.3
1986	374,088,083,000	+20.1	94,288,390,000	+24.9
1987	426,710,594,000	+14.1	103,996,200,000	+10.3
1988	476,929,318,000	+11.8	118,194,802,000	+13.7

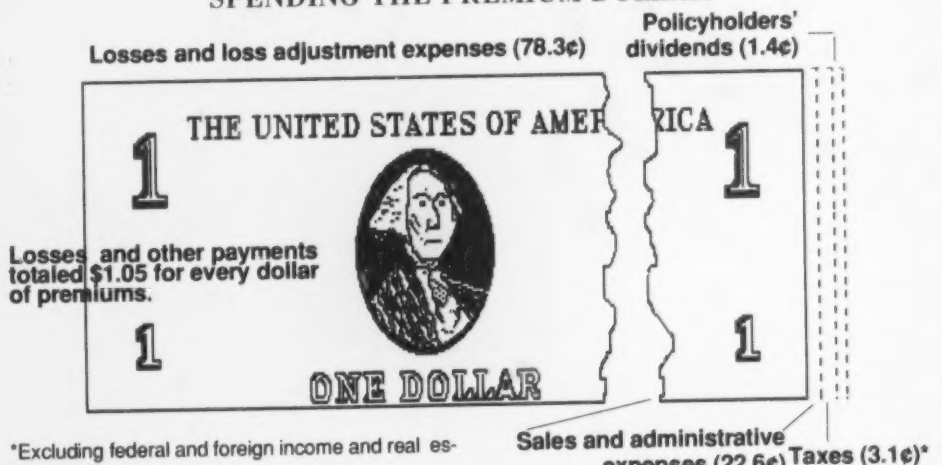
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Where the Premium Dollar Goes

Losses and expenses involved in adjusting claims accounted for nearly 80 cents of every premium dollar taken in by property and casualty insurers in 1988. The overall cost of underwriting operations in 1988, as in 1987, amounted to the equivalent of slightly more than $1.05 for every premium dollar.

Even in unprofitable years, some companies pay dividends to commercial policyholders that reflect their favorable loss experience or pay dividends that reflect the total loss experience of certain lines of insurance.

SPENDING THE PREMIUM DOLLAR



*Excluding federal and foreign income and real estate taxes.

Source: A.M. Best Company, Inc.

Operating Results, Property/Casualty Insurers

In 1988, income from investments rose by 15.7 percent, but net underwriting losses rose by 16 percent.

Profits and losses of property and casualty insurance companies, particularly in recent years, have been subject to greater fluctuations than those of other industries.

The property/casualty business during the last quarter-century has recorded a net underwriting loss, after policyholders' dividends, of more than $126 billion. The industry has shown profits on underwriting operations in only five of the last 25 years.

Investment of capital and surplus accounts and money set aside as loss reserves and unearned premium reserves generated sufficient income to permit companies to continue their insurance operations despite frequent underwriting deficits.

PROPERTY/CASUALTY INSURER OPERATING RESULTS, 1964–1988 *($1,000)*

Year	Underwriting results: Statutory underwriting gain/loss	Policyholder dividends	Net underwriting gain/loss	Investment income*	Combined net income**
1964	$ –325,723	$ 346,383	$ –672,106	$ 1,031,932	$ 359,826
1965	–352,263	357,267	–709,530	1,131,626	422,096
1966	386,927	406,802	–19,875	1,217,980	1,198,105
1967	233,619	448,577	–254,958	1,351,764	1,096,806
1968	–148,224	420,525	–568,749	1,511,509	942,760
1969	–529,899	518,055	–1,047,954	1,711,806	663,852
1970	77,776	503,558	–425,781	2,005,081	1,579,299
1971	1,381,800	555,629	826,172	2,421,495	3,247,667
1972	1,797,934	736,283	1,061,651	2,799,737	3,861,388
1973	791,761	785,698	6,063	3,325,344	3,331,408
1974	–1,878,371	766,527	–2,644,898	3,832,669	1,187,771
1975	–3,593,959	632,838	–4,226,798	4,150,204	–76,594
1976	–1,558,551	630,100	–2,188,652	4,805,939	2,617,287
1977	1,926,315	814,513	1,111,803	5,815,788	6,927,591
1978	2,548,143	1,251,811	1,296,332	7,289,554	8,585,886
1979	23,606	1,324,377	–1,300,772	9,279,235	7,978,463
1980	–1,712,423	1,621,545	–3,333,968	11,063,492	7,729,524
1981	–4,463,888	1,823,748	–6,287,636	13,248,495	6,960,859
1982	–8,303,039	1,986,827	–10,289,866	14,906,655	4,616,789
1983	–11,087,953	2,234,117	–13,322,070	15,973,234	2,651,164
1984	–19,378,885	2,098,062	–21,476,947	17,659,729	–3,817,218
1985	–22,597,292	2,196,247	–24,793,539	19,507,869	–5,285,670
1986	–13,747,925	2,164,969	–15,912,894	21,924,445	6,011,551
1987	–7,078,243	2,546,258	–9,624,501	23,959,981	14,335,480
1988	–8,391,819	2,775,958	–11,167,777	27,723,269	16,555,492

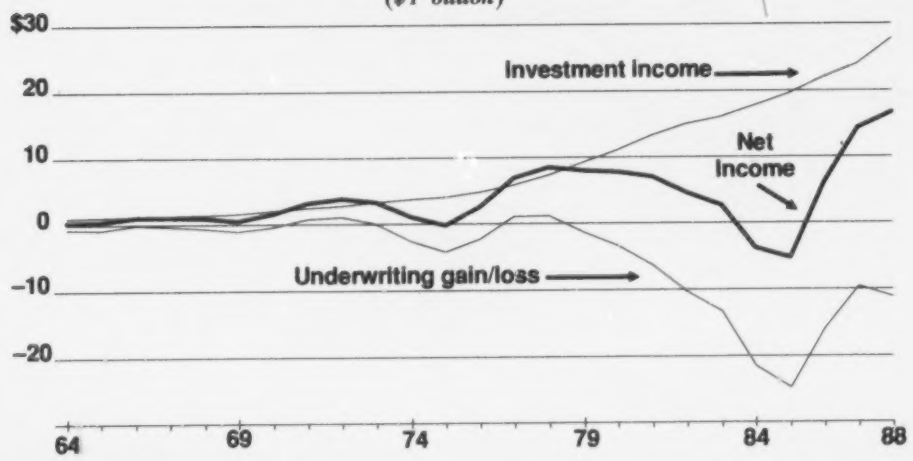
* Industrywide investment income, less investment expenses, before taxes. Figures for years prior to 1977 are aggregates and include some duplications because of interownerships within company groups. Totals from 1977 through 1988 have been consolidated to eliminate such duplications.

**Before taxes. Combined net income includes both underwriting gains or losses and investment income.

Source: A. M. Best Company, Inc., Best's Aggregates & Averages.

OPERATING RESULTS, 1964–1988

($1 billion)



Profitability: Insurance and Other Industries

In 1988, the property/casualty insurance industry showed a drop of 1.3 percent in its rate of return computed by generally accepted accounting principles (GAAP), but no change in the rate of return in statutory accounting terms. The GAAP figures are estimates because many insurance companies, particularly mutuals, do not report their data in GAAP terms.

Generally, the return on net worth of the property/casualty insurance business has been considerably less stable over the years than that recorded by other industries.

ANNUAL RATE OF RETURN: NET INCOME AFTER TAXES AS A PERCENT OF EQUITY

	Property/casualty ins.						
Year	Statutory accounting	GAAP accounting	Diversified financial*	Banks	Utilities	Transportation	Fortune 500**
1979	17.4%	15.5%	17.5%	14.1%	12.0%	13.2%	15.9%
1980	14.7	13.1	14.0	13.4	11.7	11.3	14.4
1981	13.3	11.8	11.4	13.0	12.7	13.3	13.8
1982	9.3	8.8	10.0	12.0	12.5	7.9	10.9
1983	9.1	8.3	11.7	12.5	13.3	11.6	10.7
1984	1.7	1.8	9.3	12.6	13.4	13.6	13.5
1985	2.8	3.8	9.4	13.0	13.0	11.5	11.6
1986	13.9	13.1	15.9	12.8	13.3	7.7	11.6
1987	13.2	12.8	16.3	11.1	12.8	9.7	14.4
1988	13.2	11.5	12.8	14.6	12.7	11.6	16.2
Avg.	10.9%	10.1%	12.8%	12.9%	12.7%	11.1%	13.3%

*Composed largely of companies engaged in property and casualty insurance with or without life insurance and other financial services.

**Median for Fortune 500 U.S. Industrial Corporations.

Sources: Property/casualty insurance data: GAAP accounting, Insurance Services Office; Statutory accounting, calculated by Insurance Information Institute from A.M. Best data. Other industry figures for 1984 through 1987 are medians from Fortune Magazine data. Other industry data for 1979 through 1983 are industry averages from Fortune Magazine.

Investments of Property/Casualty Insurers

Investments of property/casualty insurance companies totaled $362.9 billion in 1988, representing about 76.1 percent of total assets, which were more than $476 billion in 1988. Most of these "assets" were committed to expected losses of policyholders.

Fixed income securities continue to dominate the portfolios, with special revenue bonds accounting for almost 28 percent of the industry's invested assets in 1988. Special revenue bonds include those issued by hospitals and colleges for expansion of facilities as well as those issued for bridges and highways and a variety of public works programs, many of which would not be funded without insurance company investment. Thus, dollars spent to avoid the economic consequences of individual risk are invested to improve the common welfare, an example of the role of insurance in American society.

The last decade has seen significant fluctuations in the makeup of insurers' investment portfolios. Overall, the portion of those portfolios invested in bonds jumped from almost 60 percent in 1973 to 79 percent in 1978, falling slightly to 77.65 percent in 1988. Holdings of common stocks dropped from 35.25 percent in 1973 to 16.7 percent in 1978 and have fluctuated around that level since.

Funds used for investments are generally derived from three major sources: policyholders' surplus, unearned premium reserves, and loss reserves. The bulk of invested funds are in investments that can be sold readily—stocks and bonds, rather than general real estate—so that cash is readily available to pay claims in the event of a catastrophe.

INVESTMENTS OF PROPERTY/CASUALTY INSURERS

(*Percent of total investments*)

Investment type	1988	1983	1978
Bonds	77.65	71.38	79.07
U.S. govt.	19.44	14.70	12.12
Other govt.	.98	.74	.82
State, muni., etc.	13.04	13.92	16.46
Special rev., etc.	27.78	31.46	33.43
Railroad	.19	.28	.41
Utility	2.54	3.32	4.25
Misc.	13.50	6.70	11.19
Parent, subs., affiliates	.18	.26	.39
Common Stock	16.90	21.51	16.68
Railroad	.10	.14	.04
Utility	1.22	1.66	1.60
Bank	—	—	.96
Insurance	—	—	.40
Bank/insurance*	1.36	1.87	—
Misc.	8.62	11.81	9.41
Parent, subs., affiliates	5.60	6.03	4.26
Preferred Stock	2.78	5.05	3.60
Railroad	.01	.06	.01
Utility	1.15	3.28	2.80
Bank	—	—	.06
Insurance	—	—	.05
Bank/insurance*	.28	.25	—
Misc.	1.06	1.41	.64
Parent, subs., affiliates	.28	.06	.03
Other	2.66	2.07	.65
Mortgages	1.54	1.21	.31
Collateral loans	.07	.06	.04
Misc.	1.06	.79	.30

*Separate breakout of bank and insurance items no longer available as of 1983.
NOTE: Sums of individual items may not add up to investment type totals because of rounding.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Net Premiums Written, 1979-1988

Total net premiums written by property and casualty companies rose only 4.5 percent in 1988, reaching $202 billion. Overall, during the last decade, accident and health net premiums have increased by 47 percent, and total net premiums have increased by 124 percent. However, if the dollar value of these premiums is held constant at 1979 levels, accident and health premiums retained by property/casualty insurers fell by 9.36 percent over the decade, while total net premiums increased by only 37.48 percent.

TOTAL NET PREMIUMS WRITTEN BY PROPERTY AND CASUALTY INSURANCE COMPANIES, 1979-1988

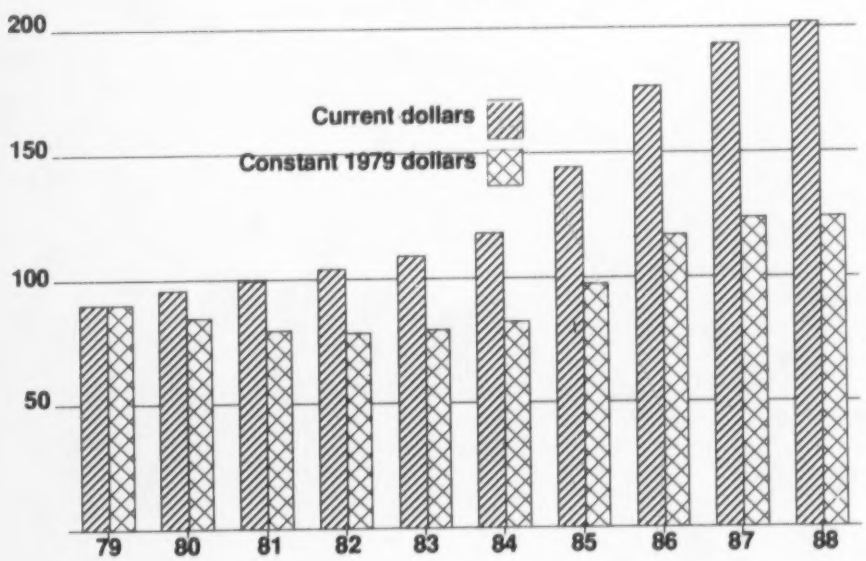
(*$1,000*)

Year	Accident and health	All other	Total	Annual % change
1979	$3,179,250	$ 86,943,369	$ 90,122,619	+10.3
1980	3,290,764	92,388,785	95,568,749	+ 6.0
1981	3,585,113	95,690,462	99,275,575	+ 3.9
1982	4,306,651	99,661,570	103,968,221	+ 4.7
1983	4,347,760	104,635,048	108,982,808	+ 4.8
1984	3,836,695	114,329,616	118,166,311	+ 8.4
1985	3,205,359	140,981,061	144,186,420	+22.0
1986	2,929,510	173,622,560	176,552,070	+22.4
1987	3,814,711	189,431,068	193,245,779	+ 9.5
1988	4,699,179	197,315,519	202,014,698	+ 4.5

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

TOTAL NET PREMIUMS IN CURRENT AND CONSTANT 1979 DOLLARS, 1979—1988

(*$1 billion*)



Automobile Insurance

The premium volume of nearly $86.3 billion for auto insurance paid in 1988 was almost double that of 1982, only six years earlier. Automobile liability insurance was nearly 61 percent of that volume. The sharpest growth in 1988 was a 9 percent increase in private passenger auto liability insurance.

Individuals or family groups purchase the bulk of auto insurance. In 1988, commercial premiums were only 19.5 percent of the total. The premium volume for the commercial lines declined slightly in 1988, after increases from 1985 to 1987.

Auto insurance is by far the largest single portion of the property/casualty insurance business. Auto insurance in 1988 accounted for nearly 43 percent of the total net premium volume.

The industry as a whole again suffered an underwriting deficit in car insurance lines in 1988. The auto insurance business has been in the red in its underwriting operations throughout the last decade.

PRIVATE PASSENGER AUTOMOBILE INSURANCE, 1979-1988

($1,000)

	Liability			Physical damage		
Year	Premiums written	Annual % change	Combined ratio*	Premiums written	Annual % change	Combined ratio*
1979	$17,385,444	+ 8.3	100.8	$11,909,408	+13.0	100.3
1980	18,590,373	+ 6.9	102.6	13,086,150	+ 9.9	96.6
1981	19,649,912	+ 5.7	108.9	14,033,870	+ 7.2	98.6
1982	21,487,468	+ 9.4	110.1	15,292,070	+ 9.0	101.4
1983	23,343,939	+ 8.6	111.0	16,974,304	+11.0	96.3
1984	24,809,382	+ 6.3	112.8	18,497,769	+ 9.0	100.6
1985	28,243,882	+13.8	118.9	21,180,583	+14.5	98.9
1986	32,972,920	+16.7	117.9	24,198,891	+14.3	93.6
1987	37,449,134	+13.6	116.1	26,838,193	+10.9	89.7
1988	40,812,744	+ 9.0	115.9	28,676,435	+ 6.8	92.0

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

COMMERCIAL AUTOMOBILE INSURANCE, 1979-1988

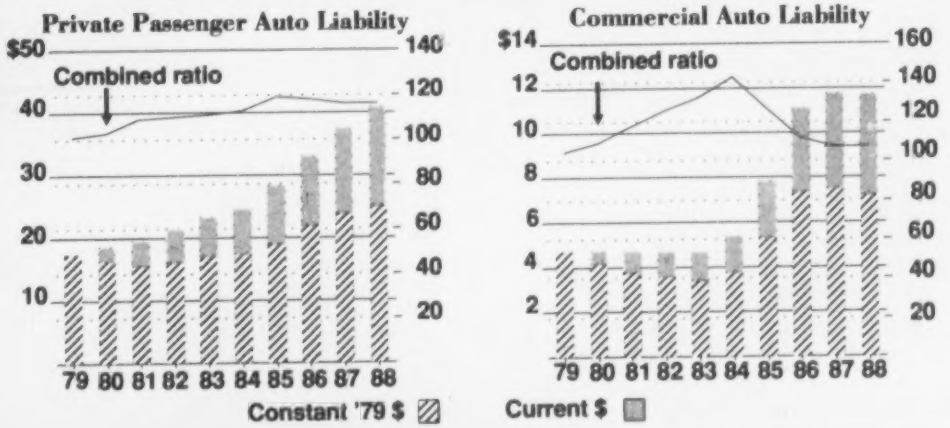
($1,000)

	Liability			Physical damage		
Year	Premiums written	Annual % change	Combined ratio*	Premiums written	Annual % change	Combined ratio*
1979	$4,716,903	+ 8.8	104.4	$2,628,293	+14.6	93.6
1980	4,728,913	+ 0.3	109.0	2,746,853	+ 4.5	95.9
1981	4,745,262	+ 0.3	117.5	2,713,919	− 1.2	99.8
1982	4,738,978	− 0.1	125.6	2,713,417	0.0	106.0
1983	4,736,128	− 0.1	132.0	2,773,199	+ 2.2	105.9
1984	5,407,281	+14.2	142.4	3,268,035	+17.8	110.9
1985	7,842,789	+45.0	126.3	4,066,136	+24.4	97.1
1986	11,108,002	+41.6	111.6	5,106,615	+25.6	82.1
1987	11,755,444	+ 5.8	107.1	5,157,198	+ 1.0	79.4
1988	11,707,484	− 0.4	107.5	5,182,808	+ 0.5	80.4

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

NET WRITTEN PREMIUMS AND COMBINED RATIOS

($1 billion)



Homeowners Multiple Peril Insurance

Underwriting results were generally favorable in 1988 for homeowners multiple peril insurance. Premium volume continued to climb, but at a much slower rate than in the past.

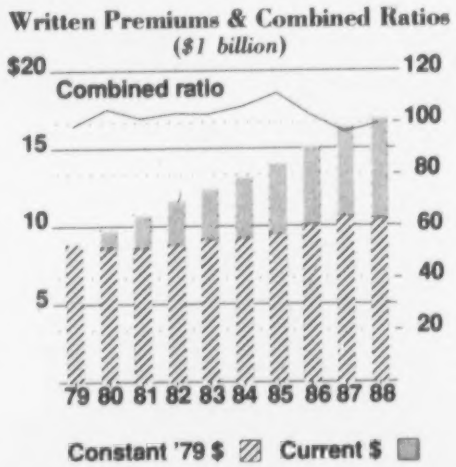
Until the mid-1950s, homeowners had to buy a variety of insurance coverages separately in order to obtain full coverage against fire, windstorm, burglary and theft, and to protect themselves against liability claims. While many homeowners purchased fire and extended coverage insurance, many failed to take advantage of other available forms of coverage. To help people more adequately safeguard their resources, insurers developed these "package" policies, which offer adequate coverage against a variety of perils at a cost lower than the combined costs of the separate coverages.

HOMEOWNERS MULTIPLE PERIL INSURANCE, 1979–1988

Year	Premiums written ($1,000)	Annual % change	Combined ratio*
1979	$ 8,791,661	+12.8	98.6
1980	9,820,753	+11.7	104.9
1981	10,779,626	+ 9.8	101.4
1982	11,746,998	+ 9.0	103.5
1983	12,511,830	+ 6.5	103.2
1984	13,212,762	+ 5.6	106.1
1985	14,066,391	+ 6.5	111.3
1986	15,222,027	+ 8.2	103.1
1987	16,653,011	+ 9.4	96.2
1988	17,093,301	+ 2.6	99.4

*Before dividends to policyholders.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.



Commercial and Farmowners Multiple Peril Insurance

Underwriting results were generally favorable in 1988 for both commercial and farmowners multiple peril insurance. Commercial multiple peril premium volume continued to climb, but at a much slower rate than in the past, while farmowners dropped very slightly.

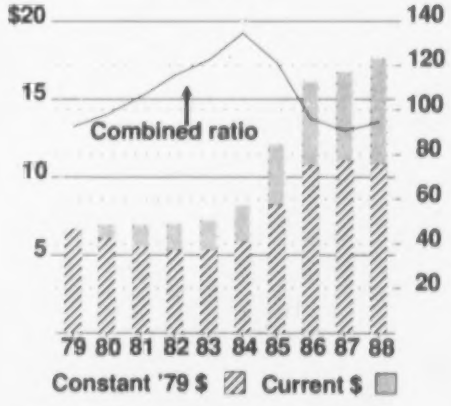
As with homeowners multiple peril coverage, similar packages for commercial and farmowner customers first appeared in the 1950s; they offer adequate coverage against a variety of perils at a cost lower than the combined costs of separate coverages. The success of these policies has had a pronounced effect on the amount of insurance written for fire, liability (other than auto), burglary and theft, inland marine, and glass because these coverages are included in the various multiple peril policies.

COMMERCIAL MULTIPLE PERIL INSURANCE, 1979—1988

Year	Premiums written ($1,000)	Annual % change	Combined ratio*
1979	$ 6,666,822	+14.4	92.5
1980	6,885,159	+ 3.3	98.0
1981	6,869,978	– 0.2	106.0
1982	7,009,385	+ 2.0	115.6
1983	7,292,720	+ 4.0	122.6
1984	8,286,962	+13.6	134.5
1985	12,096,578	+46.0	121.1
1986	16,190,282	+33.8	96.0
1987	17,230,885	+ 6.4	90.7
1988	17,656,728	+ 2.5	94.5

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Written Premiums & Combined Ratios
($1 billion)

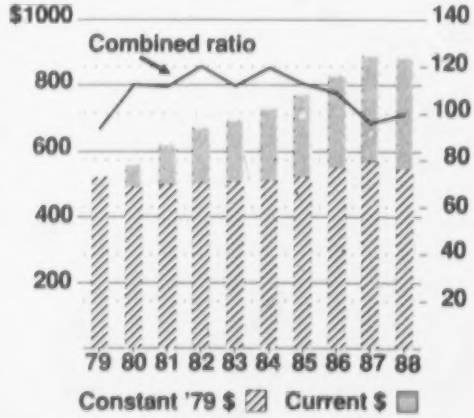


FARMOWNERS MULTIPLE PERIL INSURANCE, 1979–1988

Year	Premiums written ($1,000)	Annual % change	Combined ratio*
1979	$518,569	+19.4	93.2
1980	554,759	+ 7.0	112.0
1981	619,889	+11.7	111.2
1982	668,991	+ 7.9	120.0
1983	691,553	+ 3.4	111.4
1984	729,153	+ 5.4	119.4
1985	769,915	+ 5.6	112.3
1986	828,365	+ 7.6	108.6
1987	889,752	+ 7.4	95.7
1988	886,161	– 0.4	99.5

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Written Premiums & Combined Ratios
($1 million)



Crop-Hail Insurance

Premium volume for crop-hail insurance, which protects farmers against damage to their crops from hail and other perils, increased by 4.0 percent in 1988 over 1987.

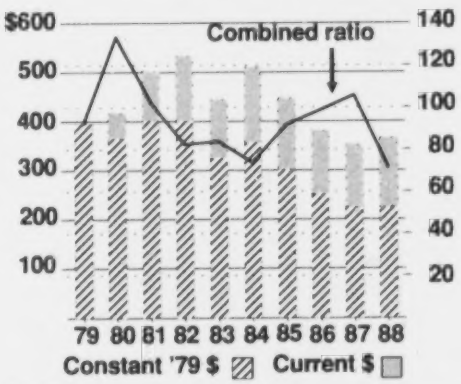
Private industry wrote an additional $373 million in multiple peril crop insurance in 1988, up sharply from the $305 million written in 1987. This "all-risk" coverage is reinsured by the Federal Crop Insurance Corporation, which wrote another $63 million of this coverage in 1988.

CROP-HAIL INSURANCE, 1979-1988

Year	Premiums written ($1,000)	Annual % change	Combined ratio
1979	$394,666	+12.8	92.4
1980	415,368	+ 5.2	133.3
1981	502,503	+21.0	102.1
1982	531,570	+ 5.8	82.4
1983	443,838	−16.5	83.9
1984	508,744	+14.6	73.6
1985	447,065	−12.1	91.7
1986	379,106	−15.2	98.7
1987	351,226	− 7.5	105.6
1988	365,269	+ 4.0	71.3

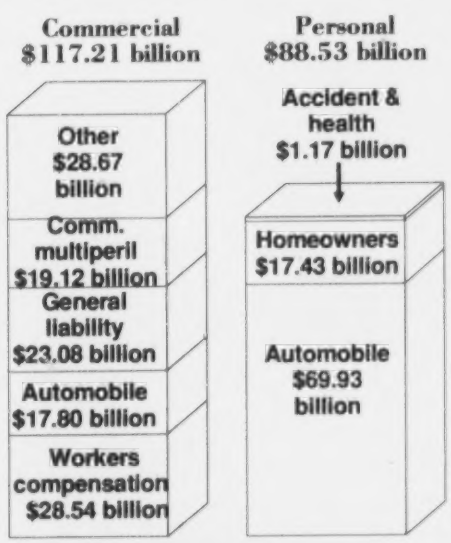
Source: Data based on reports by members and subscribers of the Crop-Hail Insurance Actuarial Association.

Written Premiums & Combined Ratios
($1 million)



Who Pays the Premium Dollar?

Within the insurance business, distinctions are made between personal and commercial lines of coverage. This chart presents these two classes of insurance as can best be estimated. However, some forms of insurance often purchased by individuals, such as farmowners insurance or coverage on high–value personal property, normally are included in commercial insurance. Thus, these estimates are not precise.



Source: Insurance Information Institute, based on data provided by A.M. Best Company.

Fire Insurance and Allied Lines

Premium volume from fire insurance policies decreased by 10 percent in 1988, perhaps reflecting the fact that fire insurance coverage is included in the popular homeowners, farmowners, and commercial multiple peril policies,

The premium volume for allied lines fell by some 8.5 percent in 1988. Allied lines refers to a wide variety of coverages that are often sold with fire coverage and cover the risks of windstorm, riot, explosion, fire sprinkler leakage and other water damage, and other perils.

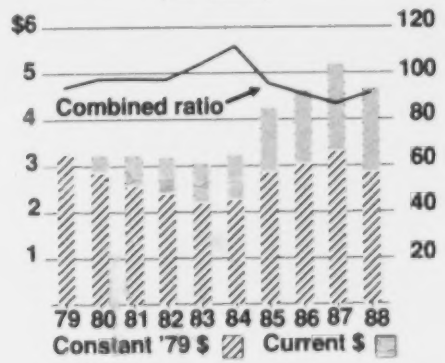
Both fire insurance and allied lines showed underwriting profits in 1988.

FIRE INSURANCE, 1979-1988

Year	Premiums written ($1,000)	Annual % change	Combined ratio
1979	$3,246,495	+ 0.7	94.3
1980	3,209,955	– 1.1	97.7
1981	3,192,516	– 0.5	97.6
1982	3,153,523	– 1.2	97.4
1983	3,011,743	– 4.5	104.1
1984	3,198,402	+ 6.2	111.5
1985	4,218,247	+31.9	95.4
1986	4,574,210	+ 8.4	90.9
1987	5,157,915	+12.8	86.8
1988	4,639,793	–10.0	91.7

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Written Premiums & Combined Ratios
($1 billion)

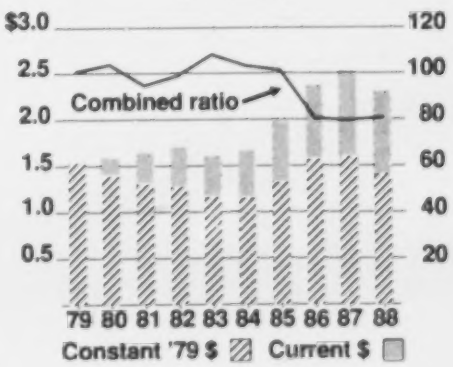


ALLIED LINES INSURANCE, 1979-1988

Year	Premiums written ($1,000)	Annual % change	Combined ratio
1979	$1,534,155	+ 5.7	100.7
1980	1,573,940	+ 2.6	103.8
1981	1,624,487	+ 3.2	94.6
1982	1,682,885	+ 3.6	99.2
1983	1,596,561	– 5.1	108.3
1984	1,654,243	+ 3.6	103.3
1985	1,955,122	+18.2	101.4
1986	2,359,011	+20.7	80.4
1987	2,498,491	+ 5.9	79.6
1988	2,285,143	– 8.5	80.9

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Written Premiums & Combined Ratios
($1 billion)



General Liability Insurance

Premium volumes in general liability failed to increase for the first time since 1982, and medical malpractice volume posted the smallest increase in nine years.

General liability insurance provides protection against claims arising from injuries to others or damage to property of others, for which the insured is held responsible because of ownership of the property doing the damage or on which the damage occurred, the sale or distribution of faulty or dangerous products, the operation of equipment, or failure to provide an acceptable level of professional services. The general liability line does not cover injuries or damages in automobile accidents.

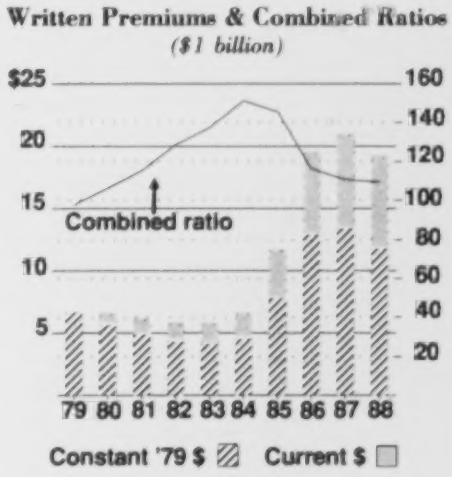
Sharp increases in the number of lawsuits and in the size of claims and awards, particularly against professionals and product manufacturers, have generated a demand for this coverage. Although liability coverage is included in both commercial and homeowners "package" policies, the premium volume for the general liability line alone rose steadily until 1980. For the next three years, premium volume dropped, in spite of the fact that more policies were being written on property of greater value due to inflation. Mounting losses and disastrously bad underwriting results for 1983-85 touched off sharp increases in premium rate levels and premium volume between 1984 and 1987.

Medical malpractice insurance premiums have been reported separately since 1974. A proliferation of insurance claims and lawsuits against hospitals, doctors, and other medical practitioners has generated a heavy demand for medical malpractice insurance and contributed to severe underwriting losses in recent years.

GENERAL LIABILITY INSURANCE, 1979-1988

Year	Premiums written ($1,000)	Annual % change	Combined ratio*
1979	$ 6,612,474	+ 1.9	97.6
1980	6,414,678	− 3.0	106.6
1981	6,046,292	− 5.7	115.3
1982	5,668,459	− 6.2	128.6
1983	5,679,295	+ 0.2	137.6
1984	6,479,268	+14.1	151.1
1985	11,544,152	+78.2	145.3
1986	19,364,658	+67.7	116.5
1987	20,873,777	+ 7.8	110.7
1988	19,077,182	− 8.6	109.6

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

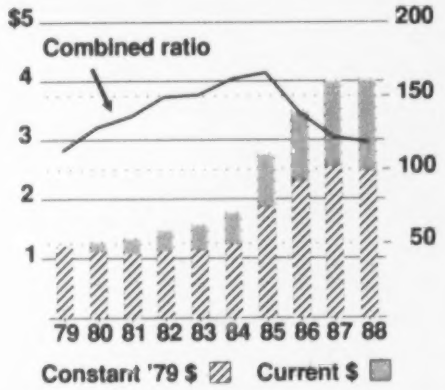


MEDICAL MALPRACTICE INSURANCE, 1979-1988

Year	Premiums written ($1,000)	Annual % change	Combined ratio*
1979	$1,204,326	– 0.9	112.6
1980	1,275,603	+ 5.9	128.2
1981	1,338,299	+ 4.9	135.7
1982	1,490,270	+11.4	149.3
1983	1,568,001	+ 5.2	150.1
1984	1,774,754	+13.2	161.1
1985	2,769,230	+56.0	166.0
1986	3,491,905	+26.1	138.6
1987	4,004,185	+14.7	121.7
1988	4,027,825	+ 0.6	118.5

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Written Premiums & Combined Ratios
($1 billion)



Workers Compensation Insurance

The rate of growth in workers compensation premiums slowed again in 1988.

Workers compensation insurance provides for medical care, rehabilitation, and lost wages for employees injured on the job, and death benefits for dependents of persons killed in work-related accidents. About nine out of 10 people in the nation's work force have this protection, which is compulsory in all but three states—New Jersey, South Carolina, and Texas. Even in those states, most businesses provide the coverage.

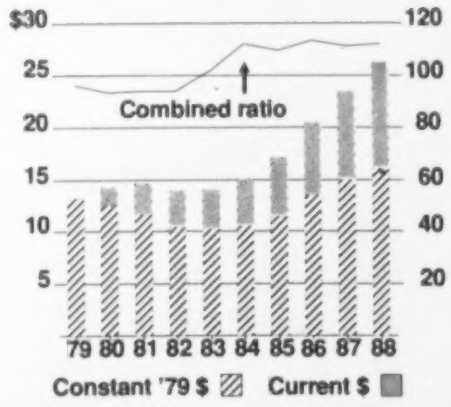
Insurers offer employers an incentive to implement effective safety programs by returning a portion of workers compensation premium dollars to companies with favorable loss experiences. In both 1987 and 1988, dividends to policyholders amounted to about 6.4 percent of premiums earned by workers compensation insurers.

WORKERS COMPENSATION INSURANCE, 1979-1988

Year	Premiums written ($1,000)	Annual % change	Combined ratio*
1979	$13,164,144	+16.5	96.4
1980	14,238,247	+ 8.2	93.4
1981	14,616,297	+ 2.7	94.1
1982	13,945,256	– 4.6	94.0
1983	14,005,293	+ 0.4	101.9
1984	15,107,292	+ 7.9	112.0
1985	17,047,548	+12.8	109.5
1986	20,431,215	+19.8	113.5
1987	23,428,978	+14.7	111.2
1988	26,135,309	+11.6	112.0

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Written Premiums & Combined Ratios
($1 billion)



Surety and Fidelity

Surety bonds, including contract, license and permit, court, and fiduciary bonds, showed an underwriting profit in 1988, the first in four years.

Surety bonds provide monetary compensation in the event the insured fails to perform certain acts—such as the proper fulfillment of a construction contract—within a stated period. Surety bonds are usually purchased by the person or company who has contracted to perform the insured act.

The sharp decline in surety premiums in 1986 was partly because of the separation of the surety and financial guaranty lines in that year.

Fidelity bonds, usually purchased by an employer, protect against losses caused by employee fraud or dishonesty.

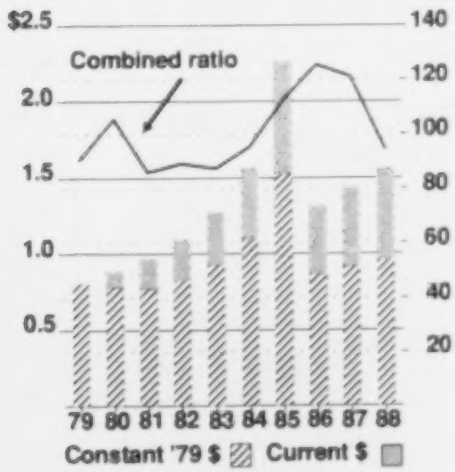
SURETY AND FIDELITY BONDS, 1979-1988

	Surety			Fidelity		
Year	Premiums written ($1,000)	Annual % change	Combined ratio*	Premiums written ($1,000)	Annual % change	Combined ratio*
1979	$ 805,142	+ 6.0	90.8	$ 350,046	+10.5	87.9
1980	887,577	+10.2	105.7	360,063	+ 2.9	93.2
1981	970,498	+ 9.3	86.1	380,749	+ 5.7	98.9
1982	1,094,117	+12.7	89.4	360,041	– 5.4	113.5
1983	1,272,198	+16.3	87.5	376,651	+ 4.6	122.3
1984	1,564,934	+23.0	95.6	431,719	+14.6	118.4
1985	2,264,435	+44.7	112.5	588,245	+36.3	94.9
1986	1,315,263	–41.9	125.4	801,012	+36.2	75.8
1987	1,441,620	+ 9.6	121.0	1,008,608	+25.9	71.4
1988	1,563,208	+ 8.4	94.5	979,544	– 2.9	72.4

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

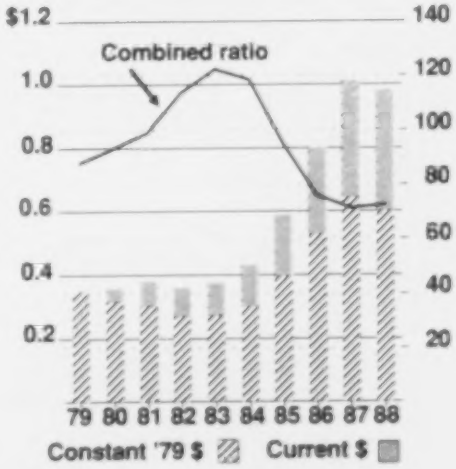
SURETY BONDS, 1979–1988

Written Premiums & Combined Ratios
($1 billion)



FIDELITY BONDS, 1979–1988

Written Premiums & Combined Ratios
($1 billion)



Burglary and Theft Insurance

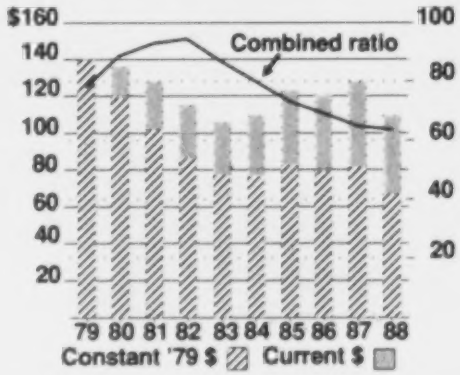
Premium volume in the burglary lines fell sharply in 1988, while underwriting profits reached their highest point in over a decade. The burglary lines include coverages for loss of property (including money and securities) due to burglary, robbery, and larceny, and loss of money and securities due to destruction or disappearance.

BURGLARY AND THEFT, 1979-1988

Year	Premiums written ($1,000)	Annual % change	Combined ratio*
1979	$140,071	+ 5.4	78.1
1980	135,727	– 3.1	88.8
1981	127,534	– 6.0	92.9
1982	114,905	– 9.9	94.5
1983	105,825	– 7.9	87.0
1984	109,005	+ 3.0	80.0
1985	122,259	+12.2	73.1
1986	121,055	– 1.0	69.1
1987	127,422	+ 5.3	64.8
1988	109,409	–14.1	63.7

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Premiums Written & Combined Ratios
($100,000)



Boiler and Machinery Insurance

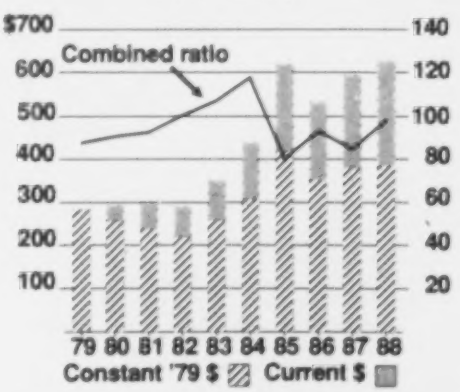
Boiler and machinery premium volume increased by only 5.1 percent in 1988. This specialized line covers a wide variety of power-producing equipment. The increased size and sophistication of this equipment have heightened the need for loss-prevention services, which insurance companies provide.

BOILER AND MACHINERY, 1979-1988

Year	Premiums written ($1,000)	Annual % change	Combined ratio*
1979	$282,795	+10.5	87.5
1980	292,624	+ 3.5	90.2
1981	298,320	+ 1.9	92.4
1982	292,845	– 1.8	100.3
1983	355,861	+21.5	107.1
1984	439,108	+23.4	117.8
1985	618,358	+40.8	79.8
1986	531,319	–14.1	93.0
1987	595,545	+12.1	84.6
1988	626,071	+ 5.1	97.7

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Premiums Written & Combined Ratios
($1 million)



Glass Insurance

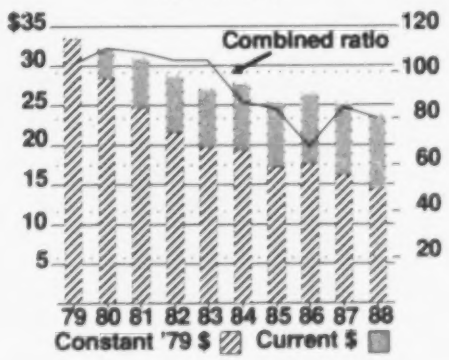
Premium volume for glass insurance continued its general decline in 1988. Architectural demands, merchandising trends, and decorative constructional functions have contributed to an ever-increasing use of glass, but many of the popular multiple peril package policies include glass coverage.

GLASS, 1979-1988

Year	Premiums written ($1,000)	Annual % change	Combined ratio*
1979	$33,457	–4.3	103.3
1980	32,248	–3.6	110.3
1981	31,085	–3.6	108.8
1982	28,814	–7.3	105.2
1983	27,092	–6.0	105.3
1984	27,842	+2.8	87.6
1985	25,492	–8.4	83.9
1986	26,608	+4.4	68.0
1987	25,389	–4.6	85.2
1988	23,681	–6.7	80.1

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Premiums Written & Combined Ratios
($1 million)



Inland Marine Insurance

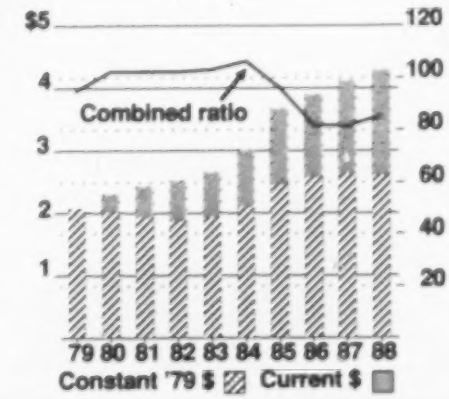
Inland marine premium volume continues to increase each year despite the diversion of personal property coverages to homeowners and other package forms. Originally developed to cover goods in transit by other than ocean vessels, inland marine insurance today covers bridges and tunnels as well as personal effects, personal property, jewelry, furs, fine arts, and many other properties.

INLAND MARINE, 1979-1988

Year	Premiums written ($1,000)	Annual % change	Combined ratio*
1979	$2,061,306	+10.4	94.9
1980	2,291,294	+11.2	102.1
1981	2,427,692	+ 6.0	102.1
1982	2,509,999	+ 3.4	102.1
1983	2,649,461	+ 5.6	102.8
1984	3,017,099	+13.9	106.0
1985	3,672,227	+21.7	95.8
1986	3,898,591	+ 6.2	81.6
1987	4,119,936	+ 5.7	81.2
1988	4,270,747	+ 3.7	85.0

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Premiums Written & Combined Ratios
($1 billion)



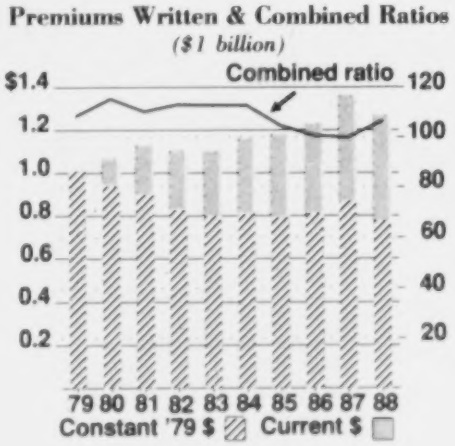
Ocean Marine Insurance

For the first time in five years, ocean marine insurance premium volume fell slightly in 1988. Despite greater international trade and the increase of pleasure craft on coastal and inland waterways, the U.S. ocean marine hull and cargo market has expanded modestly over the last decade.

OCEAN MARINE, 1979-1988

Year	Premiums written ($1,000)	Annual % change	Combined ratio*
1979	$1,008,816	+ 0.9	108.5
1980	1,064,798	+ 5.5	115.0
1981	1,126,766	+ 5.8	110.3
1982	1,100,596	– 2.3	112.9
1983	1,096,231	– 0.4	112.6
1984	1,155,131	+ 5.4	112.7
1985	1,176,528	+ 1.9	104.4
1986	1,224,729	+ 4.1	100.6
1987	1,354,533	+10.6	99.8
1988	1,262,859	– 6.8	106.0

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.



Nuclear Insurance

Insurance against losses resulting from nuclear accidents is provided by the American Nuclear Insurers, the Mutual Atomic Energy Liability Underwriters, and individual members of the MAERP Reinsurance Association.

Together the nuclear pools make available to any nuclear facility:

- Up to $200 million of liability coverage (bodily injury and property damage) and $30 million of contingent liability. These coverages protect the general public.
- Up to $500 million of insurance to cover damage to the property of nuclear facility operators.
- Up to $100 million of coverage to decontaminate adjacent property.
- Excess property insurance of $300 million.

Under the pools' Industry Credit Rating Plan, approximately 70 percent of each year's liability premium income is reserved for potential claims or for return to insureds based upon loss experience over a 10-year period. In 1988, almost $7.67 million was returned to those insureds having policies in effect in 1978. This brings the total amount refunded since 1967 to more than $52.5 million.

NUCLEAR INSURANCE PREMIUMS, 1957-1988*

Year	Liability premium	Annual % change	Property premium	Annual % change
1957-1976	$89,358,686*		$142,615,338*	
1977	17,532,802	+14.2	28,773,664	+12.7
1978	19,184,000	+ 9.4	30,702,774	+ 6.7
1979	20,316,309	+ 5.9	40,199,176	+30.9
1980	23,002,157	+13.2	61,353,439	+52.6
1981	27,521,486	+19.6	74,263,992	+20.0
1982	30,255,952	+ 9.9	98,826,043	+33.1
1983	32,389,262	+ 7.1	111,680,839	+13.0
1984	35,543,147	+29.9	131,798,114	+18.0
1985	42,053,813	+18.3	143,880,947	+ 9.2
1986	55,401,909	+31.7	140,882,556	- 2.1
1987	62,824,490	+11.5	160,906,144	+14.2
1988	77,643,402	+19.1	173,526,209	+ 7.3

* Gross written premiums.
**Represents gross written premiums from inception to Nov. 30, 1976.
Source: American Nuclear Insurers.

Direct Written Premiums by State

Direct premiums written by property/casualty insurance companies in 1988 totaled almost $206 billion, an increase of about 3 percent over 1987. Data provided by A.M. Best Company (representing about 98 percent of the nation's total insurance market) are the basis for the tabulations that follow of premiums by state and by line. The totals given here are based on direct premiums written, while those used elsewhere in *Insurance Facts* are based on net premiums written.

DIRECT WRITTEN PREMIUMS BY STATE, 1988

($1,000)

State	All lines total	State	All lines total
Alabama	$ 2,614,001	Maryland	$ 4,119,519
Alaska	592,839	Massachusetts	7,242,956
Arizona	2,736,663	Michigan	7,632,449
Arkansas	1,559,316	Minnesota	3,670,254
California	30,394,433	Mississippi	1,592,023
Colorado	2,558,325	Missouri	3,960,793
Connecticut	4,251,479	Montana	530,983
Delaware	663,353	Nebraska	1,125,972
District of Columbia	698,071	Nevada	859,349
Florida	10,536,129	New Hampshire	1,169,340
Georgia	5,251,587	New Jersey	7,416,499
Hawaii	1,005,078	New Mexico	992,029
Idaho	624,332	New York	17,464,879
Illinois	9,794,868	North Carolina	4,116,181
Indiana	3,653,241	North Dakota	435,865
Iowa	1,901,971	Ohio	6,874,938
Kansas	1,873,417	Oklahoma	2,087,381
Kentucky	2,294,883	Oregon	2,121,921
Louisiana	3,179,930	Pennsylvania	10,794,456
Maine	1,107,514	Rhode Island	1,020,404

(Table continues)

State	All lines total	State	All lines total
South Carolina	2,334,619	Virginia	4,372,547
South Dakota	452,181	Washington	3,087,152
Tennessee	3,375,391	West Virginia	967,499
Texas	13,501,651	Wisconsin	3,491,643
Utah	842,144	Wyoming	286,365
Vermont	509,474	**Countrywide**	**205,740,286**

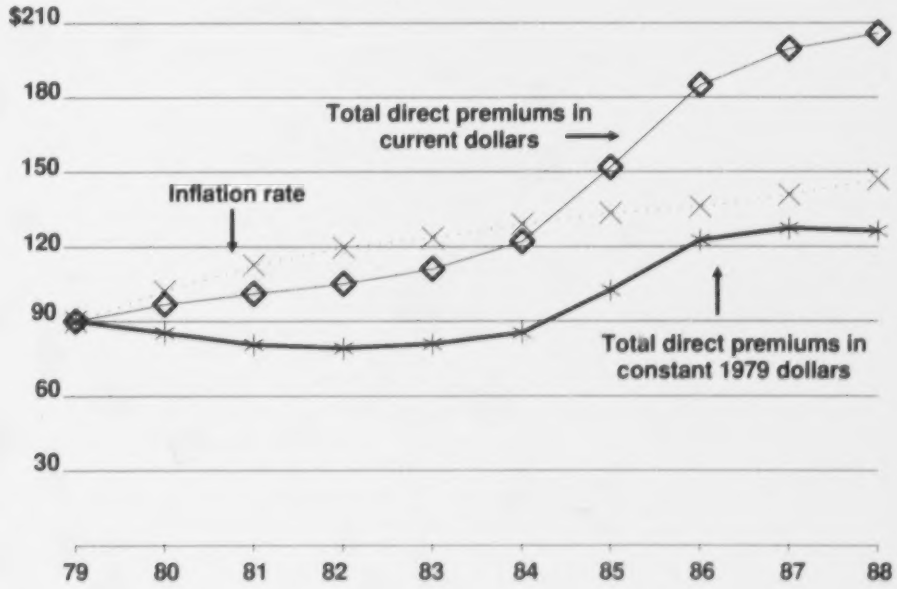
Source: A.M. Best Company, Inc., Best's Executive Data Service.

While there has been constant growth in the the amount of direct premiums written over the last decade, that growth has not kept up with the rate of inflation. If adjustments are made for inflation, premium growth appears so slow as to suggest that insurance costs have generally declined in relation to costs of other goods and services.

That adjustment also illustrates the insurance market cycle. In the graph below, when the constant dollar line (the heavy solid line) moves away from the inflation rate line (the dotted line), the market is softening; when it moves toward the inflation rate line, the market is hardening.

DIRECT PREMIUMS WRITTEN, 1979–1988, IN CURRENT AND CONSTANT 1979 DOLLARS

($1 billion)



DIRECT WRITTEN PREMIUMS BY LINE, 1988

($1,000)

State	Pvt. passenger auto		Commercial auto		Home-owners	Farm-owners
	Liability	Phys. dmg.	Liability	Phys. dmg.		
Alabama	$ 368,607	$ 440,404	$ 164,320	$ 75,346	$ 292,585	$ 25,297
Alaska	78,338	52,554	22,567	8,056	37,849	83
Arizona	732,839	377,536	156,389	72,034	230,116	5,561
Arkansas	289,962	224,201	116,198	52,390	162,776	6,449
California	7,193,568	3,809,806	1,434,816	605,979	2,179,925	78,950
Colorado	611,116	331,515	125,585	67,020	264,170	16,815
Connecticut	863,946	525,642	254,020	102,851	338,758	1,346
Delaware	144,323	83,872	48,235	19,240	45,024	1,983
Dist. of Col.	87,447	60,203	19,255	6,649	39,328	1
Florida	2,008,639	1,386,016	729,037	274,618	879,613	8,323
Georgia	1,134,222	812,954	345,757	139,055	433,420	27,378
Hawaii	226,700	109,144	55,006	19,424	55,845	24
Idaho	119,744	90,642	36,226	18,886	49,718	15,514
Illinois	1,514,488	1,323,896	479,556	237,061	709,992	59,232
Indiana	686,806	578,009	255,935	147,032	366,269	52,766
Iowa	275,476	253,286	126,813	70,883	136,801	28,772
Kansas	304,726	271,225	103,430	67,587	185,207	39,226
Kentucky	450,936	343,912	126,395	74,956	195,902	46,189
Louisiana	597,048	358,022	246,745	64,677	348,911	1,829
Maine	161,006	145,801	68,930	37,668	94,982	1,589
Maryland	1,153,628	566,831	287,678	112,143	287,908	8,165
Massachusetts	1,581,973	1,180,050	413,464	214,199	622,076	1,009
Michigan	1,246,403	1,562,337	288,251	236,249	675,979	51,903
Minnesota	750,523	420,848	186,866	92,634	321,084	24,221
Mississippi	247,594	240,703	111,843	58,663	193,969	998
Missouri	667,644	592,056	227,692	113,084	355,692	42,416
Montana	100,303	72,196	39,945	23,390	47,127	14,612
Nebraska	167,437	151,655	76,085	45,831	91,114	25,159
Nevada	258,910	131,540	47,463	20,582	77,142	2,234
New Hampshire	190,312	186,460	70,180	41,757	106,432	426
New Jersey	2,164,637	1,275,026	806,227	249,815	680,154	1,394
New Mexico	192,311	149,258	53,110	35,647	86,989	5,522
New York	2,982,771	2,129,056	1,059,679	369,786	1,401,491	15,548
North Carolina	956,226	634,564	307,660	121,690	386,513	19,404
North Dakota	69,082	62,181	25,383	16,654	31,596	21,134
Ohio	1,472,300	1,153,553	421,303	234,673	632,452	38,314
Oklahoma	396,105	341,240	120,311	73,080	288,632	37,848
Oregon	483,047	286,329	126,052	61,521	151,308	18,282
Pennsylvania	2,562,388	1,293,836	713,415	285,244	745,175	23,579
Rhode Island	180,075	153,726	61,754	26,641	96,484	60
South Carolina	561,889	381,596	151,026	55,558	223,913	1,852
South Dakota	68,779	64,880	31,158	19,463	28,058	14,910
Tennessee	556,111	580,310	234,396	103,419	326,963	33,735
Texas	2,183,854	1,928,579	734,617	268,176	1,388,466	42,331
Utah	190,956	148,667	54,881	28,303	77,672	2,660
Vermont	73,040	77,211	30,200	17,864	52,662	6,654
Virginia	1,036,709	660,710	306,291	104,087	335,117	14,175
Washington	793,371	452,293	176,897	93,317	294,794	21,046
West Virginia	248,440	190,159	63,363	36,204	103,184	3,790
Wisconsin	599,769	442,805	199,060	109,135	241,185	51,001
Wyoming	48,279	53,010	17,352	11,786	32,093	5,700
Totals	**41,399,575**	**28,534,526**	**12,358,819**	**5,442,006**	**17,430,617**	**965,412**

Source: A.M. Best Company, Inc., Best's Executive Data Service.

DIRECT WRITTEN PREMIUMS BY LINE, 1988

($1,000)

State	Comm. multiperil	Workers compensation	Med. mal-practice	Other liability	Fire	Allied lines
Alabama	$ 233,984	$ 344,252	$ 77,764	$ 240,316	$ 71,420	$ 27,105
Alaska	66,873	162,270	17,249	55,935	10,986	3,896
Arizona	270,586	208,577*	114,709	303,966	28,367	28,852
Arkansas	120,476	221,951	26,777	124,456	51,925	33,395
California	3,030,385	5,626,124*	711,887	2,880,013	375,159	203,331
Colorado	262,991	277,970*	25,885	246,279	25,261	37,348
Connecticut	404,998	733,300	72,644	583,245	59,417	32,733
Delaware	49,324	97,593	20,577	67,957	9,505	8,698
Dist. of Col.	72,758	122,546	26,180	122,136	9,189	4,573
Florida	1,015,434	1,272,512	143,993	993,589	134,368	227,347
Georgia	392,197	769,979	169,766	436,590	94,678	57,629
Hawaii	79,547	225,138	18,408	122,970	13,368	9,727
Idaho	64,452	80,937*	15,136	57,799	10,619	18,804
Illinois	880,667	1,613,879	297,847	1,454,584	134,641	134,836
Indiana	371,188	357,260	37,730	378,805	63,967	44,395
Iowa	151,183	255,066	44,803	232,540	42,131	118,658
Kansas	147,965	261,337	37,543	178,966	35,404	86,185
Kentucky	181,547	317,399	69,854	207,436	50,834	24,986
Louisiana	222,903	465,889	55,602	316,047	91,956	90,312
Maine	111,104	261,432	37,254	87,902	10,718	7,731
Maryland	337,839	488,603*	100,052	413,468	44,177	27,172
Massachusetts	620,020	1,165,173	26,790	803,568	111,619	52,132
Michigan	671,999	817,598*	196,795	1,261,782	102,473	44,795
Minnesota	326,954	547,224*	86,954	419,258	45,327	101,381
Mississippi	105,064	209,964	26,369	114,444	71,026	52,478
Missouri	354,683	489,734	117,061	440,065	65,884	54,080
Montana	65,052	45,900	17,848	41,365	9,374	16,988
Nebraska	101,631	119,561	20,474	106,836	26,180	81,350
Nevada	109,917	3,825	26,077	89,400	12,887	7,549
New Hampshire	124,273	215,031	10,871	110,531	17,952	8,641
New Jersey	956,408	1,049,302	237,212	1,131,891	109,467	73,303
New Mexico	86,508	189,020	5,383	77,835	13,610	12,469
New York	2,192,886	1,323,487*	865,087	2,772,595	274,452	96,535
North Carolina	313,596	453,879	79,486	346,470	91,170	79,511
North Dakota	42,266	2,601*	17,543	36,296	9,300	55,936
Ohio	729,526	29,182	240,876	672,937	129,985	64,801
Oklahoma	175,826	222,029	10,589	156,632	49,448	45,215
Oregon	202,394	348,782*	39,115	186,945	37,617	20,940
Pennsylvania	917,172	1,825,231*	246,797	1,293,337	153,631	67,041
Rhode Island	91,891	188,152	5,702	115,523	10,281	9,337
South Carolina	168,212	337,868	10,236	157,292	63,177	40,025
South Dakota	40,024	55,016	13,418	37,785	9,046	28,740
Tennessee	280,838	487,402	82,691	301,429	82,866	28,863
Texas	715,744	2,875,683	172,185	1,382,296	329,801	312,780
Utah	91,102	41,047	18,555	83,633	12,038	5,725
Vermont	62,956	78,227	12,702	63,012	11,849	4,550
Virginia	376,238	539,201	112,351	427,950	72,640	40,456
Washington	324,483	44,262	93,220	350,560	54,387	42,106
West Virginia	81,091	2,634	36,779	87,961	29,741	10,817
Wisconsin	284,170	564,980	49,011	297,410	49,903	38,350
Wyoming	43,064	2,382	9,949	23,895	6,117	5,373
Totals	**19,125,092**	**28,538,403**	**5,011,782**	**23,075,921**	**3,448,300**	**2,708,601**

*Does not include premiums written by state workers compensation funds.

Source: A.M. Best Company, Inc., Best's Executive Data Service.

DIRECT WRITTEN PREMIUMS BY LINE, 1988

($1,000)

State	Inland marine	Ocean marine	Surety	Fidelity	Burglary & theft	Boiler & machinery
Alabama	$ 74,193	$ 10,802	$ 25,543	$ 13,231	$ 1,292	$ 9,205
Alaska	17,010	5,913	11,491	1,921	83	2,412
Arizona	49,710	3,921	43,038	6,194	841	4,838
Arkansas	45,667	2,524	10,946	8,228	630	5,702
California	689,639	107,539	271,964	116,920	10,259	48,407
Colorado	58,030	1,799	29,831	12,614	1,144	7,772
Connecticut	96,818	22,376	24,103	25,250	3,429	11,199
Delaware	19,821	3,996	7,785	3,816	486	1,784
Dist. of Col.	25,228	2,491	19,306	23,751	906	4,010
Florida	309,990	64,785	121,267	36,120	5,092	20,127
Georgia	138,603	15,029	44,615	22,571	2,944	12,360
Hawaii	14,542	4,025	14,422	4,695	341	1,721
Idaho	13,677	807	7,325	2,118	152	2,634
Illinois	279,332	34,728	87,128	71,626	6,332	32,483
Indiana	102,676	4,679	28,672	17,561	1,212	14,257
Iowa	46,184	1,273	13,440	10,449	1,092	7,296
Kansas	47,417	929	15,409	9,562	866	6,265
Kentucky	59,522	6,568	23,949	11,353	1,018	8,819
Louisiana	78,235	57,659	26,871	11,810	1,357	13,771
Maine	25,506	9,344	370	3,254	454	4,105
Maryland	83,702	17,577	40,132	19,048	2,936	10,007
Massachusetts	160,649	43,782	50,850	36,186	3,719	17,819
Michigan	147,177	20,431	38,814	32,931	3,277	23,746
Minnesota	96,393	13,029	31,439	24,989	2,230	12,325
Mississippi	54,119	3,440	16,076	7,585	1,186	4,984
Missouri	104,272	34,031	31,295	23,718	2,767	11,017
Montana	11,775	186	6,232	2,957	220	1,840
Nebraska	31,360	679	10,820	7,453	667	4,531
Nevada	21,049	722	13,851	3,019	6	2,235
New Hampshire	26,914	13,487	7,661	4,005	373	2,993
New Jersey	207,549	38,703	71,637	45,164	5,539	22,256
New Mexico	20,044	4,439	22,848	3,316	203	2,546
New York	492,031	398,101	148,936	206,963	16,941	48,345
North Carolina	102,189	11,940	34,954	20,003	2,272	13,930
North Dakota	10,712	443	5,693	3,451	240	2,417
Ohio	177,478	16,746	63,535	38,064	7,167	25,528
Oklahoma	57,812	2,587	19,522	13,323	1,224	5,491
Oregon	46,877	12,709	25,456	6,604	946	8,002
Pennsylvania	193,013	30,306	69,677	56,754	5,014	37,095
Rhode Island	26,963	9,534	8,484	4,710	491	2,752
South Carolina	58,787	5,422	17,403	6,968	869	6,442
South Dakota	10,318	127	4,909	2,407	245	1,276
Tennessee	82,875	13,387	31,108	16,650	1,742	9,018
Texas	347,336	118,899	132,873	63,878	5,833	36,304
Utah	19,732	960	12,427	5,223	373	2,055
Vermont	11,057	1,588	2,867	2,284	110	1,590
Virginia	95,784	19,045	50,147	23,481	2,686	12,903
Washington	106,442	51,673	44,430	15,035	1,555	11,522
West Virginia	20,239	2,081	9,689	5,719	443	4,004
Wisconsin	72,824	3,852	18,984	15,934	3,077	14,782
Wyoming	7,179	164	6,733	1,738	111	1,532
Totals	**5,096,426**	**1,256,268**	**1,866,759**	**1,134,199**	**114,479**	**580,394**

Source: A.M. Best Company, Inc., Best's Executive Data Service.

DIRECT WRITTEN PREMIUMS BY LINE, 1988

($1,000)

State	Glass	Aircraft	Earthquake	Credit	Accident & health	Miscellaneous
Alabama	$ 217	$ 9,151	$ 316	$ 3,060	$ 57,815	$ 38,840
Alaska	2	17,742	1,114	2,868	2,943	8,158
Arizona	254	18,461	791	1,996	34,202	37,606
Arkansas	123	7,497	1,016	338	22,011	19,553
California	3,754	113,934	313,641	23,862	289,480	240,489
Colorado	145	12,687	711	1,514	44,339	28,414
Connecticut	284	28,415	715	2,352	26,911	31,174
Delaware	50	3,702	103	1,690	13,909	7,844
Dist. of Col.	23	15,788	139	23	27,459	4,997
Florida	1,461	54,258	1,581	4,849	165,035	144,741
Georgia	258	35,170	737	6,866	72,763	75,911
Hawaii	144	7,299	356	453	12,875	9,411
Idaho	35	4,248	249	743	8,187	5,200
Illinois	2,106	44,769	3,282	8,987	258,703	106,447
Indiana	293	10,915	1,494	2,265	83,857	37,956
Iowa	429	6,450	407	814	58,019	18,554
Kansas	355	13,209	392	1,226	55,624	19,098
Kentucky	214	5,209	2,607	430	31,481	50,111
Louisiana	192	17,374	442	1,232	44,450	48,360
Maine	45	2,168	99	448	7,919	12,287
Maryland	280	7,859	540	17,098	42,873	47,482
Massachusetts	1,186	12,797	1,691	11,302	39,373	63,436
Michigan	534	32,260	892	2,566	100,430	63,553
Minnesota	276	24,005	286	3,009	101,251	34,912
Mississippi	87	5,427	743	698	34,447	24,434
Missouri	245	24,525	5,546	4,043	118,523	50,376
Montana	19	2,997	141	92	6,547	4,139
Nebraska	176	4,931	148	475	38,120	13,176
Nevada	73	7,573	536	257	12,418	8,065
New Hampshire	43	3,971	194	1,348	11,755	8,797
New Jersey	952	28,806	1,134	7,308	64,900	77,022
New Mexico	49	6,172	350	342	11,912	10,238
New York	1,946	51,108	2,300	25,710	292,934	133,935
North Carolina	379	12,694	753	7,691	53,105	59,171
North Dakota	27	2,168	33	581	15,381	3,162
Ohio	1,008	29,991	2,845	5,590	387,848	96,195
Oklahoma	222	9,533	405	600	28,558	25,633
Oregon	194	11,471	882	2,253	23,218	20,157
Pennsylvania	834	26,789	1,503	7,619	116,684	92,418
Rhode Island	77	2,207	261	805	6,637	7,949
South Carolina	135	5,863	2,455	1,301	28,241	35,427
South Dakota	62	1,673	52	83	17,935	1,408
Tennessee	251	10,698	3,532	3,019	53,937	44,901
Texas	1,830	79,123	1,427	6,038	188,677	162,096
Utah	49	7,883	736	345	25,669	10,167
Vermont	27	1,117	81	160	4,004	3,562
Virginia	445	12,194	629	2,167	57,869	74,141
Washington	413	24,252	3,251	1,067	32,109	47,897
West Virginia	186	2,438	102	383	13,092	10,331
Wisconsin	623	11,721	403	2,304	184,939	40,009
Wyoming	13	1,762	116	72	4,784	1,986
Totals	**23,022**	**894,455**	**364,159**	**182,344**	**3,436,153**	**2,212,018**

Source: A. M. Best Company, Inc., Best's Executive Data Service.

Premium Taxes

Insurance companies—including life, health and property/casualty companies—paid nearly $6.90 billion in premium taxes to the 50 states and the District of Columbia in 1988—an increase of about 8 percent over 1987. Approximately 47 percent of this amount was paid by property/casualty companies.

Premium taxes are taxes on gross premiums or adjusted gross premiums. They are an additional form of taxation on policyholders. Additional payments are made to states for licenses and fees, property taxes, sales and use taxes, unemployment compensation taxes, and in a few states, income and franchise taxes. Premium taxes accounted for about 2.2 percent of all taxes collected by the states during 1988.

PREMIUM TAXES BY STATE, 1988

($1,000)

State	Premium taxes	State	Premium taxes
Alabama	$ 138,497	Montana	$ 39,510
Alaska	23,661	Nebraska	34,502
Arizona	72,433	Nevada	46,446
Arkansas	44,416	New Hampshire	35,229
California	1,152,508	New Jersey	168,138
Colorado	82,224	New Mexico	43,483
Connecticut	150,968	New York	489,490
Delaware	25,188	North Carolina	186,833
Dist. of Columbia	30,212	North Dakota	14,662
Florida	316,325	Ohio	240,836
Georgia	150,312	Oklahoma	137,207
Hawaii	38,876	Oregon	58,730
Idaho	23,532	Pennsylvania	336,488
Illinois	187,001	Rhode Island	30,362
Indiana	103,489	South Carolina	83,185
Iowa	81,033	South Dakota	23,480
Kansas	72,269	Tennessee	122,438
Kentucky	147,922	Texas	545,808
Louisiana	184,822	Utah	25,286
Maine	33,464	Vermont	17,175
Maryland	128,103	Virginia	180,460
Massachusetts	248,060	Washington	93,619
Michigan	43,882	West Virginia	47,155
Minnesota	126,765	Wisconsin	78,414
Mississippi	76,448	Wyoming	9,735
Missouri	155,402	**Total**	**$6,896,341**

Source: Bureau of the Census, U.S. Department of Commerce.

Insurance Guaranty Funds

All 50 states, Washington, D.C., and Puerto Rico have procedures under which solvent property/casualty insurance companies cover claims against insolvent insurers. New York has a pre-assessment system which requires the maintenance of a permanent fund (to which companies contribute) with a $200 million ceiling. The other jurisdictions have set up guaranty associations to which solvent companies pay assessments as needed on a proportionate basis.

From the inception of the post-assessment funds in 1969 through December 1987, the associations have covered 153 property/casualty insurer insolvencies.

The figures below include assessments for six of the 16 insolvencies that occurred in 1988. They do not include payments made by individual companies under the insolvency provision of the uninsured motorist endorsement to auto insurance policies. They also do not take into consideration recoupments available in some states through premium tax offsets and policyholder surcharges.

GUARANTY FUND ASSESSMENTS BY STATE, 1969–1988

($1,000)

State	Amount collected	Amount refunded	Net assessments	State	Amount collected	Amount refunded	Net assessments
Ala.	$ 27,264	$ 0	$ 27,264	Neb.	$ 15,505	$ 7,309	$ 8,197
Alaska	10,746	1,403	9,343	Nev.	19,861	2,430	17,431
Ariz.	41,243	0	41,243	N.H.	10,464	1,440	9,024
Ark.	14,799*	0	14,799	N.J.	23,897	12,479	11,419
Calif.	677,378	51,746	625,632	N.M.	8,377	0	8,377
Colo.	29,261	960	28,301	N.Y.**	**	**	**
Conn.	65,282	4,172	61,110	N.C.	15,491	1,121	14,369
Del.	16,359	0	16,359	N.D.	4,320*	0	4,320
D.C.	5,935	738	5,197	Ohio	52,910	5,878	47,032
Fla.	362,360	7,642	354,719	Okla.	44,786*	0	44,786
Ga.	58,327	4,834	53,492	Ore.	22,841	0	22,841
Hawaii	35,251	500	34,751	Pa.	120,575	7,301	113,274
Idaho	6,091	0	6,091	P.R.	49,693*	17,913	31,780
Ill.	169,733	13,696	156,037	R.I.	9,198	1,225	7,973
Ind.	11,378	1,245	10,133	S.C.	15,701	1,536	14,165
Iowa	27,024	970	26,053	S.D.	5,307	0	5,307
Kan.	17,070	72	16,998	Tenn.	12,986	280	12,706
Ky.	18,827	662	18,164	Texas	91,673	0	91,673
La.	51,331	3,973	47,358	Utah	7,174*	0	7,174
Maine	13,922	5,526	8,396	Vt.	5,144	765	4,379
Md.	28,661	1,090	27,571	Va.	15,871	1,830	14,041
Mass.	43,479	10,006	33,472	Wash.	28,617	292	28,325
Mich.	122,587	8,492	114,095	W.Va.	14,884	782	14,102
Minn.	121,363	6,030	115,333	Wis.	27,854	2,999	24,855
Miss.	15,189	1,067	14,122	Wyo.	2,132	30	2,103
Mo.	28,584	849	27,735	**Total**	**$2,670,066**	**$191,544**	**$2,478,152**
Mont.	25,363	258	25,105				

*Does not include 1988 amounts. **New York has a pre-assessment fund.
Source: National Committee on Insurance Guaranty Funds.

CHAPTER 3

Shared Markets

The Automobile Shared Market

Data provided by the Automobile Insurance Plans Service Office (AIPSO) reflect an increase of only 6.45 percent from 1987 to 1988 in the number of cars insured through the various shared market mechanisms countrywide. The increase in volume from 1986 to 1987 was 14.7 percent. Only 16 states reported increases in 1988 compared to 34 in 1987.

The insurance industry has established mechanisms in every state to provide automobile insurance for drivers who, for whatever reason, are unable to obtain coverage in the voluntary market. The first of the shared market mechanisms was established in New Hampshire in 1938. Today, all 50 states and the District of Columbia use one of four systems to guarantee the availability of auto insurance.

- Automobile Insurance Plan—Auto insurance applicants unable to obtain coverage in the competitive market are distributed to insurance companies in proportion to the amount of business each insurer writes voluntarily in the state. The insurers service these policyholders in the same way they service their other customers.
- Joint Underwriting Association—JUAs are pooling mechanisms where all companies share in the profits and losses as well as expenses incurred in the shared market. Agents submit applications to several companies which have agreed to issue and service policies.
- Reinsurance Facility—Under this pooling system, each auto insurer is required to provide coverage and service the claims for any applicant, but is permitted to transfer a percentage of its policies to the facility. Profits or losses are shared by all insurers licensed in the state.
- State Fund—Maryland established a state-funded mechanism in 1973. Private insurers don't participate directly in the Maryland Automobile Insurance Fund, but are required by law to subsidize any losses from the operation, with the costs being charged back to their own policyholders.

PRIVATE PASSENGER CARS INSURED IN SHARED MARKETS, 1987–1988

(Written car years)

State	1988	1987	% change	State	1988	1987	% change
Ala.	2,110	2,767	–23.74%	Neb.	480	732	–34.43%
Alaska	4,614	4,788	– 3.63	Nev.	64	91	–29.67
Ariz.	149	208	–28.37	N.H.	224,303*	195,144	+14.94
Ark.	1,754	2,072	–15.35	N.J.	1,714,118	1,771,106	– 3.22
Calif.	803,932	471,775	+70.41	N.M.	221	341	–35.19
Colo.	225	576	–60.94	N.Y.	1,341,511	1,257,619	+ 6.67
Conn.	194,175	189,081	+ 2.69	N.C.	971,748*	923,161	+ 5.26
Del.	29,357	28,875	+ 1.67	N.D.	171	187	– 8.56
D.C.	31,550	31,425	+ 0.40	Ohio	486	644	–24.53
Fla.	100,074	122,773	–18.49	Okla.	3,912	3,656	+ 7.00
Ga.	36,352	43,725	–16.86	Ore.	1,114	2,266	–50.84
Hawaii	9,934	8,919	+11.38	Pa.	152,590	135,261	+12.81
Idaho	223	382	–41.62	R.I.	61,468	60,492	+ 1.61
Ill.	3,110	4,178	–25.56	S.C.	687,317	617,075	+11.38
Ind.	1,114	1,766	–36.92	S.D.	316	490	–35.51
Iowa	610	787	–22.49	Tenn.	18,401	23,133	–20.46
Kan.	8,799	10,710	–17.84	Texas	170,812	256,460	–33.40
Ky.	27,917	34,488	–19.05	Utah	108	106	+ 1.89
La.	7,188	10,828	–33.62	Vt.	15,930	10,217	+55.92
Maine	48,642	25,953	+87.42	Va.	116,906	143,604	–18.59
Md.	76,161	97,385	–21.79	Wash.	2,766	4,312	–35.78
Mass.	2,187,541	1,978,296	+10.58	W.Va.	3,164	4,187	–24.43
Mich.	162,222	173,061	– 6.26	Wis.	894	1,595	–43.95
Minn.	15,246	17,568	–13.22	Wyo.	69	167	–58.68
Miss.	7,198	8,690	–17.17	**Nationwide**	**9,258,746**	**8,697,416**	**+ 6.45%**
Mo.	9,501	14,080	–32.52				
Mont.	176	214	–17.76				

*Estimated.

Sources: State shared-market mechanisms in Maryland and Massachusetts; Automobile Insurance Plans Service Office for all other states.

Insurance through FAIR Plans

Fair Access to Insurance Requirement (FAIR) policies in force at the end of 1988 showed a 3 percent decline in value and number since 1987. This decline, the first in four years, reflects the increased availability of regular insurance policies. New applicants accounted for about 28 percent of the policies issued in 1988. In contrast, in 1986, the last year of the "hard" market, new applicants bought 47 percent of the policies issued.

Operated by the insurance industry, the plans were created to make property insurance more readily available to those who had difficulty obtaining it because of abnormal exposure to risks over which they had no control. FAIR plans now operate in 29 states, Washington, D.C., and Puerto Rico. Two new plans, both for rural areas, were begun in 1988 in Arkansas and Mississippi.

INSURANCE PROVIDED BY FAIR PLANS, 1988

Jurisdiction	Applications		Binders/policies issued		Insurance in force, Dec. 31
	New	Renewal	New	Renewal	($1,000)
Arkansas (Rural)	N.A.	N.A.	N.A.	N.A.	N.A.
California	57,834	113,505	25,075	105,064	N.A.
Connecticut	2,098	4,013	932	3,670	$ 377,240
Delaware	725	1,811	432	1,718	67,321
Dist. of Col.	2,311	3,989	896	3,668	378,255
Georgia	5,932	5,919	3,068	5,042	394,437
Illinois	9,431	23,244	4,104	17,396	1,018,233
Indiana	771	2,275	525	2,140	65,178
Iowa	472	949	287	947	32,822
Kansas	3,310	6,031	2,511	6,138	194,676
Kentucky	17,741	0	13,303	52,565	2,003,837
Louisiana	3,671	3,183	1,010	3,027	131,830
Maryland	4,860	10,234	2,599	9,234	329,000
Massachusetts	19,532	48,636	12,533	44,321	3,430,183
Michigan	46,694	168,814	41,967	154,393	10,059,141
Minnesota	2,781	945	1,437	1,388	122,937
Mississippi (Rural)	967	0	852	0	24,342
Missouri	14,166	27,072	4,838	23,625	617,986
New Jersey	17,343	52,916	11,396	45,703	3,335,460
New Mexico	3,295	5,426	3,263	5,426	455,383
New York	20,302	77,158	13,415	77,158	5,437,214
North Carolina	20,411	22,845	11,649	21,511	1,279,222
Ohio	7,465	15,028	9,183	15,028	441,687
Oregon	1,664	4,476	1,646	4,476	N.A.
Pennsylvania	26,108	84,169	16,272	62,895	2,230,927
Puerto Rico	N.A.	N.A.	N.A.	N.A.	N.A.
Rhode Island	3,160	8,463	2,341	6,374	414,017
Virginia	6,054	11,972	3,753	11,160	484,246
Washington	265	665	155	626	83,150
West Virginia	1,820	1,336	1,037	1,019	37,930
Wisconsin	3,945	8,200	2,020	5,889	218,750
Totals	**304,928**	**713,324**	**192,499**	**691,601**	**$33,665,404**

N.A. = Not available.
Source: National Committee on Property Insurance.

Insurance through Beach and Windstorm Plans

In 1988, beach plans, which operate on the Atlantic and Gulf Coasts where storm damage risk is especially high, saw a 4 percent increase in policies and a 3 percent rise in insurance in force.

INSURANCE PROVIDED BY BEACH AND WINDSTORM PLANS, 1988

State	Applications		Binders or policies issued		Insurance in force,
	New	Renewal	New	Renewal	Dec. 31 ($1,000)
Alabama	458	3,043	364	3,043	$ 216,384
Florida	11,586	50,527	8,846	50,527	7,149,152
Louisiana	2,001	6,480	1,377	6,375	207,627
Mississippi	5,245	194	5,375	278	119,360
No. Carolina	5,691	12,048	3,826	10,184	1,262,512
So. Carolina	1,064	5,458	787	5,084	951,468
Texas	69,609	*	44,420	*	4,185,577
Totals	**95,654**	**77,750**	**64,995**	**75,491**	**$14,092,080**

*Included with "New".
Source: National Committee on Property Insurance.

Government Insurance Programs

Flood Insurance in the United States

Under a new law which came into effect in 1988, the National Flood Insurance Program (NFIP) will now pay claims for anticipated damage to insured buildings subject to imminent collapse as a result of erosion or subsidence. The owners of such buildings may relocate or demolish them.

The Federal Insurance Administration, which administers the NFIP, offers insurance against flood and mudflow losses or imminent collapse due to erosion to property owners in participating communities in every state, Washington, D.C., Puerto Rico, Guam, and the Virgin Islands. In 1983 private insurers began selling flood insurance under a "Write Your Own" (WYO) procedure providing for government reimbursement of losses not covered by premium and investment income. As a result of WYO, the percentage of flood policies issued directly by the NFIP declined from 100 percent before 1983 to about 20 percent by the end of 1988, while the total amount of insurance in force has increased. The average amount of coverage has also increased and was over $76,000 at the end of 1988. Average coverage under WYO policies remains slightly higher than under NFIP policies.

Over 20,000 communities have identified special flood hazard areas, and about 18,000 have qualified for the coverage by agreeing to take steps to minimize future flood damage. Flood insurance is available only in participating communities; the failure of flood-prone communities to participate has significant impact on the availability of funds for certain mortgages.

FLOOD INSURANCE IN THE UNITED STATES, 1988

	Direct NFIP business		WYO business		NFIP/WYO combined	
State	No. of policies	Ins. in force ($)*	No. of policies	Ins. in force ($)*	No. of policies	Ins. in force($)*
Ala.	4,904	$312,450	12,047	$772,972	16,951	$1,085,422
Alaska	948	68,583	1,078	78,037	2,026	146,620
Ariz.	7,919	545,251	12,975	868,321	20,894	1,413,572
Ark.	3,182	142,171	4,393	177,083	7,575	319,253

*Final "000" omitted; some totals do not balance because of rounding.

(Table continues)

State	Direct NFIP business		WYO business		NFIP/WYO combined	
	No. of policies	Ins. in force ($)*	No. of policies	Ins. in force ($)*	No. of policies	Ins. in force($)*
Calif.	55,587	4,755,112	62,160	5,008,933	117,747	9,764,045
Colo.	4,553	323,658	3,291	231,535	7,844	555,193
Conn.	10,180	931,556	7,898	752,253	18,078	1,683,808
Del.	1,538	165,835	5,608	493,084	7,146	658,919
D.C.	35	5,583	11	1,187	46	6,769
Fla.	60,411	5,103,972	681,553	54,826,451	741,964	59,930,422
Ga.	4,878	361,337	15,754	1,324,493	20,632	1,685,830
Hawaii	2,704	287,486	8,002	825,035	10,706	1,112,521
Idaho	1,037	53,461	640	39,046	1,677	92,507
Ill.	12,498	649,300	11,675	623,439	24,173	1,272,738
Ind.	6,909	287,061	6,386	267,154	13,295	554,214
Iowa	2,349	98,612	2,072	84,985	4,421	183,597
Kan.	3,984	166,983	2,741	113,934	6,725	280,917
Ky.	3,839	205,115	9,851	435,558	13,690	640,673
La.	29,793	1,998,036	216,457	14,659,570	246,250	16,657,606
Maine	1,829	114,658	3,395	187,014	5,224	301,671
Md.	6,126	477,716	18,129	1,287,779	24,255	1,765,495
Mass.	16,115	1,481,964	6,880	559,290	24,995	2,041,254
Mich.	6,593	362,863	8,478	444,120	15,071	806,984
Minn.	2,243	124,926	2,845	122,564	4,908	247,492
Miss.	5,165	307,838	27,162	1,540,130	32,327	1,847,968
Mo.	7,638	339,641	6,559	300,839	14,197	640,481
Mont.	970	44,703	322	14,240	1,292	58,943
Neb.	3,041	133,904	4,512	186,159	7,553	320,063
Nev.	2,985	172,749	2,407	120,644	5,392	293,393
N.H.	1,645	105,914	1,233	77,839	2,878	183,753
N.J.	38,673	3,588,061	77,763	6,803,307	116,436	10,391,368
N.M.	2,624	115,538	2,279	111,171	4,903	226,710
N.Y.	31,166	2,480,082	31,206	2,382,074	62,372	4,862,156
N.C.	11,715	940,345	26,872	1,974,949	38,587	2,915,294
N.D.	2,702	115,437	2,444	99,528	5,146	214,965
Ohio	7,849	366,123	6,319	281,894	14,168	648,017
Okla.	7,016	448,348	4,277	265,007	11,293	713,355
Ore.	3,477	223,868	2,126	121,942	5,603	345,810
Pa.	20,577	1,049,868	32,864	1,565,543	53,441	2,615,411
R.I.	4,946	399,552	2,910	242,942	7,856	642,493
S.C.	3,974	364,260	41,572	4,297,695	45,546	4,661,955
S.D.	512	26,602	292	15,440	804	42,042
Tenn.	3,095	186,806	3,873	232,435	6,968	419,241
Texas	35,903	3,036,777	184,908	16,101,218	220,811	19,137,994
Utah	887	48,946	482	26,685	1,369	75,631
Vt.	850	39,622	1,143	54,969	1,993	94,591
Va.	8,631	635,746	29,581	2,456,923	38,212	3,092,669
Wash.	6,746	419,353	3,448	189,788	10,194	609,141
W. Va.	4,774	187,996	8,136	304,131	12,910	492,127
Wis.	3,656	169,645	2,447	105,064	6,103	274,709
Wyo.	816	42,613	553	27,086	1,369	69,699
Guam	27	1,163	0	0	27	1,163
P.R.	5,539	167,990	2,378	68,003	7,917	235,993
V.I.	1,221	73,198	493	39,128	1,714	112,328
Totals	**480,974**	**35,256,375**	**1,622,364**	**124,190,606**	**2,095,654**	**159,446,981**

*Final "000" omitted; some totals do not balance because of rounding.

Source: Federal Insurance Administration, Federal Emergency Management Agency.

Federal Crime Insurance

In 1988, 14 states, Washington, D.C., Puerto Rico, and the Virgin Islands participated in the Federal Crime Insurance Program, down from 22 states in 1987. The eight states no longer in the program are Arkansas, Colorado, Iowa, Massachusetts, Missouri, North Carolina, Ohio, and Virginia. The primary reason for the sharp decline in state participation was the increased availability of insurance against burglary and robbery in the traditional market.

From the end of 1987 to year-end 1988, the number of policies in force decreased about 9 percent. The amount of coverage in force declined by over 9 percent. Several participating states saw an increase in the number of residential federal crime insurance policies, but only one state, Illinois, showed an increase in commercial ones.

The Federal Crime Insurance Program, established by Congress in 1970, began Aug. 1, 1971. It is administered by the Federal Insurance Administrator, who is authorized to make federal crime insurance available in states in which that official sees an availability problem. Policies, for both individuals and businesses, cover losses from burglary and robbery.

Nat.Con-Serv, Inc., a Maryland corporation, acts as the servicing carrier. Policies are sold through licensed property insurance agents and brokers and also directly by the servicing carrier.

FEDERAL CRIME INSURANCE, 1988

State	Policies in force at year end			Insurance in force at year end ($1,000)		
	Residential	Commercial	Total	Residential	Commercial	Total
Alabama	706	13	719	$ 5,785	$ 95	$ 5,880
California	1,568	550	2,118	13,246	8,096	21,342
Connecticut	81	20	101	8,186	15,114	23,300
Delaware	113	2	115	806	30	836
Dist. of Col.	47	72	119	387	918	1,305
Florida	1,462	702	2,164	13,103	9,423	22,526
Georgia	282	129	411	2,230	1,238	3,468
Illinois	266	330	596	2,129	2,928	5,057
Kansas	255	17	272	1,676	174	1,805
Maryland	61	99	160	498	1,202	1,700
New Jersey	1,142	221	1,363	9,459	2,777	12,236
New York	11,309	4,407	15,716	95,597	58,628	154,225
Pennsylvania	1,470	380	1,850	10,821	4,152	14,973
Rhode Island	19	21	40	154	144	298
Tennessee	125	96	221	977	774	1,751
Puerto Rico	565	153	718	4,295	1,823	6,118
Virgin Islands	119	24	143	960	260	1,220
Totals	**19,590**	**7,236**	**26,826**	**$163,483**	**$92,921**	**$255,404**

Source: Federal Insurance Administration, Crime Insurance Statistical Report.

Factors Affecting Costs

Trends in Costs of Goods, Services, and Insurance

The cost of insurance is heavily influenced by the costs of materials and services paid by insurers to meet insurance claims. The indices below show trends in insurance costs and in typical costs which affect insurance claims. Except as otherwise noted, all index figures are annual averages.

PRICE INDICES FOR HOUSEHOLD INSURANCE AND RELATED ITEMS AND ANNUAL RATES OF CHANGE, 1979–1988

(Base: 1982–84 = 100)

	Cost of living (all items)		Homeowners' costs*		House maintenance and repairs	
Year	Index	% change	Index	% change	Index	% change
1979	72.6	+11.3%			74.0	+10.1%
1980	82.4	+13.5			82.4	+11.4
1981	90.9	+10.3			90.7	+10.1
1982	96.5	+ 6.2			96.4	+ 6.3
1983	99.6	+ 3.2	102.5		99.9	+ 3.6
1984	103.9	+ 4.3	107.3	+4.7%	103.7	+ 3.8
1985	107.6	+ 3.6	113.1	+5.4	106.5	+ 2.7
1986	109.6	+ 1.9	119.4	+5.6	107.9	+ 1.3
1987	113.6	+ 3.6	124.8	+4.5	111.8	+ 3.6
1988	118.3	+ 4.1	131.1	+5.0	114.7	+ 2.6
% change, 1979–1988	+62.9			N.A.		+55.0

	Renters' costs*		House furnishings		Household insurance**	
Year	Index	% change	Index	% change	Index	% change
1979			82.9	+ 5.7%		
1980			88.5	+ 6.8		
1981			94.1	+ 6.3		
1982			98.5	+ 4.7		
1983	103.0		100.4	+ 1.9	103.2	
1984	108.6	+ 5.4%	101.2	+ 0.8	107.5	+ 4.2%
1985	115.4	+ 6.3	101.7	+ 0.5	112.4	+ 4.6
1986	121.9	+ 5.6	102.2	+ 0.5	119.2	+ 6.0
1987	128.1	+ 5.1	103.6	+ 1.4	124.0	+ 4.0
1988	133.6	+ 4.3	105.1	+ 1.4	129.0	+ 4.0
% change, 1979–1988	N.A.			+26.8		N.A.

*Indexing of homeowners' and renters' costs and household insurance was started in 1983 with a base of 100 as of December 1982. Previously indexed items which have been discontinued include home ownership and property insurance premiums (up 130.3 and 139.6 percent, respectively, between 1974 and 1983).
**Measures renters insurance only, not homeowners. N.A. = Not applicable.
Source: U.S. Department of Labor, Bureau of Labor Statistics.

PRICE INDICES FOR AUTO INSURANCE AND RELATED ITEMS AND ANNUAL RATES OF CHANGE, 1979–1988

(Base: 1982–84= 100)

	Medical care items		Hospital rooms		Physicians' fees		Auto insurance	
Year	Index	% change	Index	% change	Index	% change	Index	% change
1979	67.5	+ 9.2%	60.1	+ 11.3%	69.2	+ 9.1%	75.8	+ 5.6%
1980	74.9	+ 11.0	68.0	+ 13.1	76.5	+ 10.5	82.0	+ 8.2
1981	82.9	+ 10.7	78.1	+ 14.9	84.9	+ 11.0	85.9	+ 4.8
1982	92.5	+ 11.6	90.4	+ 15.7	92.9	+ 9.4	91.4	+ 6.4
1983	100.6	+ 8.8	100.6	+ 11.3	100.1	+ 7.8	100.4	+ 9.8
1984	106.8	+ 6.2	109.0	+ 8.3	107.0	+ 6.9	108.2	+ 7.8
1985	113.5	+ 6.3	115.4	+ 5.9	113.3	+ 5.9	119.2	+ 10.2
1986	122.0	+ 7.5	122.3	+ 6.0	121.5	+ 7.2	135.0	+ 13.3
1987	130.1	+ 6.6	131.1	+ 7.2	130.4	+ 7.3	146.2	+ 8.3
1988	138.6	+ 6.5	143.3	+ 9.3	139.8	+ 7.2	156.6	+ 7.1
% change, 1979–1988		+105.3		+138.4		+102.0		+106.6
% change, 1981-1988								+ 82.3

Auto Repair Costs per Claim

	Parts[1]		Labor[2]		Taxes and Other[3]		Total	
Year	Amount	% change	Amount	% change	Amount	% change	Amount	% change
1981	$512.75		$391.75		$ 55.74		$ 960.24	
1982	548.14	+ 6.9%	413.79	+ 5.6%	65.16	+ 16.9%	1,027.09	+ 7.0%
1983	579.24	+ 5.7	431.58	+ 4.3	72.73	+ 11.6	1,083.55	+ 5.5
1984	602.96	+ 4.1	457.40	+ 6.0	73.79	+ 1.5	1,134.15	+ 4.7
1985	637.53	+ 5.7	507.55	+11.0	79.83	+ 8.2	1,224.91	+ 8.0
1986	705.69	+10.7	559.86	+10.3	89.44	+ 12.0	1,354.99	+10.6
1987	767.09	+ 8.7	613.13	+ 9.5	100.17	+ 12.0	1,480.39	+ 9.3
1988	861.37	+12.3	663.68	+ 8.2	113.54	+ 13.3	1,638.59	+10.7
% change, 1981–1988		+68.0		+69.4		+103.7		+70.6

[1]Consists of original equipment manufacturers' (OEM) parts, non-OEM parts (aftermarket), salvage parts, and paint and related materials.
[2]Includes labor costs of sheet metal, mechanical/electrical, frame, and refinishing workers.
[3]Other costs are taxes on parts and labor, towing and storing, and sublet repair.
Sources: Auto repair costs, Report of the National Association of Insurance Commissioners Special Advisory Committee on Auto Repair Costs; all other data, U.S. Department of Labor, Bureau of Labor Statistics.

Health Care Costs

The cost of health care in the United States in recent years has been the equivalent of more than 10 percent—11.1 percent in 1987—of the nation's gross national product, according to the Department of Health and Human Services (HHS). In 1987, the national health expenditure of some $500.3 billion amounted to an outlay of $1,987 for every man, woman and child in the country. The overall cost of health care was 9.8 percent higher in 1987 than in 1986.

HHS said hospital care accounted for $196.2 billion, or 39 percent of the nation's total health expenditures, in 1987. A steady increase in hospital room costs has been a major factor in the rising cost of health care.

As shown below, the average semiprivate room cost $258.72 per day as of January 1989, a 9.6 percent increase over the January 1988 figure of $236.03, according to a survey by the Health Insurance Association of America (HIA).

The HIA data change from year to year because the association uses only matching data, i.e., data for the same hospital for both years reported. For this reason, the 1988 HIA data for this edition of *Insurance Facts* are often different than the 1988 data given in last year's edition. The HIA says that reporting by major hospitals has declined, which means that the figures given here may understate real costs. In addition, hospitals in the Borough of Manhattan in New York City were not canvassed in 1989.

HOSPITAL SEMIPRIVATE ROOM RATES*, JANUARY 1988–89

State	1989	1988	% increase	State	1989	1988	% increase
Ala.	$205.03	$187.37	9.4%	Mont.	$235.06	$215.81	9.0%
Alaska	374.50	337.29	11.0	Neb.	192.01	180.04	6.6
Ariz.	256.00	236.97	8.0	Nev.	256.17	239.32	7.0
Ark.	158.43	149.02	6.3	N.H.	291.39	250.76	16.2
Calif.	371.40	335.27	10.8	N.J.	251.70	235.00	7.1
Colo.	233.09	218.62	6.6	N.M.	235.48	231.03	2.0
Conn.	343.63	329.55	4.3	N.Y.	284.61	239.16	19.0
Del.	N.A.	N.A.	N.A.	N.C.	173.11	159.32	8.7
D.C.	417.65	381.50	9.5	N.D.	212.82	199.52	6.7
Fla.	237.03	219.06	8.2	Ohio	273.86	253.61	8.0
Ga.	178.86	160.66	11.3	Okla.	205.45	187.91	9.3
Hawaii	283.56	256.33	10.6	Ore.	329.57	303.77	8.5
Idaho	243.35	227.49	7.0	Pa.	303.08	272.08	11.4
Ill.	271.94	254.95	6.7	R.I.	297.30	273.12	8.9
Ind.	238.61	229.18	4.1	S.C.	216.77	194.82	11.3
Iowa	213.54	201.75	5.8	S.D.	189.73	180.51	5.1
Kan.	232.49	215.30	8.0	Tenn.	182.51	171.62	6.3
Ky.	209.47	196.43	6.6	Texas	203.65	189.53	7.5
La.	227.53	214.64	6.0	Utah	273.60	233.81	17.0
Maine	295.37	248.97	18.6	Vt.	304.13	264.11	15.2
Md..	243.48	223.57	9.0	Va.	186.65	183.26	1.8
Mass.	299.59	265.11	13.0	Wash.	321.57	292.49	10.0
Mich.	307.48	292.95	5.0	W.Va.	199.44	185.88	7.3
Minn.	231.94	216.47	7.1	Wis.	197.26	180.12	9.5
Miss.	186.38	162.32	14.8	Wyo.	200.72	180.90	11.0
Mo.	243.41	222.63	9.3	P.R.	170.00	160.00	6.3
				National	**$258.72**	**$236.03**	**9.6%**

*Data apply to medical-surgical semiprivate accommodations and exclude pediatric, intensive care, cardiac care, extended care, self-care, psychiatric, and tuberculosis beds.
Source: Health Insurance Association of America.

The frequency of lawsuits and the average size of settlements, including jury awards, have a significant impact on the cost of liability insurance.

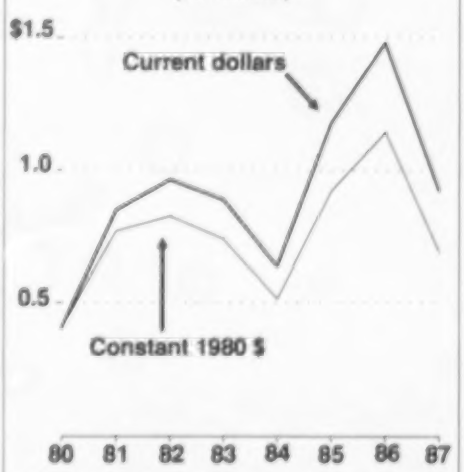
Jury Verdict Research, Inc. (JVR) reported a slight reversal of three trends in 1987: The rate of increase in the size of personal injury awards fell below 10 percent for the first time in the 1980s; the number of verdicts for plaintiffs increased at a lower rate than usual; and the number of million dollar verdicts dropped below 400 for the first time since 1983. JVR's analysis does not include defense verdicts, nor does it take into account appeals or other post-trial actions.

JVR also tracks awards for five personal injuries: cervical strain (back pain), knee injury, vertebra fracture, paraplegia, and wrongful death of an adult male. The latter injury generally brings the largest awards because of the loss of assumed future earnings. In 1987, average awards for cervical strain, knee injury, and wrongful death declined sharply. Nevertheless, the overall trend continued upward.

JVR has kept records of million-dollar verdicts since the first one was recorded in 1962. A decrease in the number of such awards in 1986 marked the first single-year decline since 1973. Such verdicts declined again in 1987, reaching the lowest level since 1983. More than 3,501 million-dollar verdicts had been recorded through 1988, although that year's data are still incomplete. The largest source of million-dollar awards has been product liability suits (775), followed closely by vehicular liability cases (772, including bus and bicycle accidents), and medical malpractice suits (646).

JVR reports that, generally, plaintiffs do not win medical malpractice suits as frequently as they do other liability suits, but when they do win, they tend to win high awards. However, in 1987, the percentage of million-dollar awards in medical malpractice suits dropped sharply to 22 percent from 34 percent in 1986 and 1985. In 1987, plaintiff awards in product liability cases declined to 231, a level not seen since before 1982, but the average award size increased, largely due to one award of $95 million in a case involving birth defects caused by a drug the mother had taken during pregnancy. Punitive damages made up $75 million of that award.

Average Awards for Medical Malpractice, 1980–1987
($1 million)



Source: Jury Verdict Research, Inc., *Current Award Trends in Personal Injury*, 1989.

Annual state-by-state compilations by the Administrative Office of the U.S. Courts of new product liability suits filed in federal courts show that of 17,140 cases filed in fiscal 1988, some 94.3 percent involved personal injuries, 2.9 percent were property damage filings, and 2.8 percent were contract actions.

Of the personal injury suits, 66.3 percent were new asbestos cases, most of them filed in Arizona, Iowa, Ohio, and Pennsylvania. Even in many states that saw a decline in new cases, the majority of new cases were asbestos suits. For example, New York and California exhibited sharp drops in the number of new suits, but saw 478 and 268 new asbestos cases, respectively.

PRODUCT LIABILITY CASES OPENED IN FEDERAL DISTRICT COURTS, 1987–1988

State	1988*	1987*	% Change	State	1988*	1987*	% Change
Ala.	275	149	+ 84.6	Nev.	27	31	– 12.9
Alaska	39	23	+ 69.6	N.H.	44	59	– 25.4
Ariz.	133	42	+ 216.7	N.J.	161	163	– 1.2
Ark.	155	192	– 19.3	N.M.	45	55	– 18.2
Calif.	475	690	– 31.2	N.Y.	792	1,289	– 38.6
Colo.	84	68	+ 23.5	N.C.	132	103	+ 28.2
Conn.	179	508	– 64.8	N.D.	20	20	0.0
Del.	25	15	+ 66.7	Ohio	2,831	1,310	+ 116.1
D.C.	70	55	+ 27.3	Okla.	298	231	+ 29.0
Fla.	378	367	+ 3.0	Ore.	98	62	+ 58.1
Ga.	360	407	– 11.5	Pa.	2,985	1,103	+ 170.6
Hawaii	501	311	+ 61.1	R.I.	68	47	+ 44.7
Idaho	33	21	+ 57.1	S.C.	204	187	+ 9.1
Ill.	335	460	– 27.2	S.D.	18	32	– 43.8
Ind.	102	117	– 12.8	Tenn.	241	208	+ 15.9
Iowa	934	72	+1,197.2	Texas	1,425	2,535	– 43.8
Kan.	76	92	– 17.4	Utah	40	34	+ 17.6
Ky.	147	96	+ 53.1	Vt.	18	11	+ 63.6
La.	489	673	– 27.3	Va.	405	451	– 10.2
Maine	55	76	– 27.6	Wash.	93	215	– 56.7
Md.	242	265	– 8.7	W. Va.	140	102	+ 43.1
Mass.	317	501	– 36.7	Wis.	71	75	– 5.3
Mich.	693	439	+ 57.9	Wyo.	22	21	+ 4.8
Minn.	114	102	+ 11.8	P.R.	34	13	+ 161.5
Miss.	325	561	– 42.1	Guam	–	1	– 100.0
Mo.	186	312	– 40.4	N.M.I.	–	–	0.0
Mont.	51	50	+ 2.0	V.I.	30	14	+ 114.3
Neb.	119	115	+ 3.5	**Total**	**17,140**	**15,151**	**+ 13.2**

*Twelve-month period ended June 30.

Source: Administrative Office of the U.S.Courts, 1988 Annual Report.

Medical Malpractice

The crisis in professional liability insurance for physicians, commonly called medical malpractice insurance, seems to be abating. Rates had escalated sharply in the 1980s reflecting huge increases in claims costs, but by early 1989, reports from various sources showed that conditions nationwide finally were improving. The most significant change is in the number of claims, which has begun to drop, as is the incidence of million-dollar jury awards. A January 1989 study by Jury Verdict Research, Inc. shows a decline in the number of exceedingly high awards. Of the 279 medical malpractice awards reported to the service in 1987, only 22 percent totaled $1 million or more, a sharp decrease from 1986, when 34 percent of awards reached the million-dollar level.

Overall operating results for the medical malpractice insurance industry have begun to improve. The combined ratio before policyholder dividends fell 3.2 points to 118.5, an $18.50 loss on every $100 of net premiums earned, but far from the 151.1 ratio of 1984. In May 1989, a large nationwide insurer announced rate cuts beginning in July 1989 in 34 states. Rates will increase in only three states. Nationwide, the company will decrease rates by about 14 percent. In Maryland, the largest medical malpractice insurer reported that it would not raise rates in 1989, its third year of flat rates.

Rates are coming down because the number of claims filed has declined. This in turn lowers compensation payments and also administrative and legal expenses. In 1985, according to one large medical malpractice insurer, 17.3 claims were filed for every 100 doctors insured. In 1986, that figure began to drop, falling to 13 claims for every 100 doctors in the first six months of 1988. Nevertheless, the size of each claim continues to rise. Data from the same company show that the average cost per claim in 1980 was $18,100. Five years later in 1985, the average cost stood at $29,000 and the annual average increase over the five–year period was 9.9 percent. By mid–1988, the average cost per claim had risen to $39,300, and the annualized rate of increase over the two and a half-year period had surged to 12.9 percent.

Observers attribute the drop in the number of claims filed to many factors including changes in the legal environment brought about by recent tort reform measures, increased communication between doctors and their patients, and more diagnostic testing. The decrease in large awards may result, in part, from the passage of tort reforms that set caps on pain and suffering awards. The drop in the number of claims and the decline in million–dollar awards have brought more companies into the marketplace and made coverage more available.

Until recently, efforts to significantly lower the incidence of medical malpractice have been hampered by a lack of information on doctors from out of state. How-

ever, in the fall of 1988, funding for a national medical malpractice data bank that would provide information on doctors who have been convicted of medical malpractice was authorized under the Health Care Quality Improvement Act of 1986 and the Medicare and Medicaid Patient Protection Act of 1987. The collection of information began in the summer of 1989; data will not be collected retroactively. The National Practitioner Data Bank will include information on the payments licensed medical providers make as a result of malpractice actions and on disciplinary actions taken by state physician and dental boards, peer-review groups, and professional societies.

One aspect of the medical malpractice crisis has been its impact on obstetrics, a high-risk specialty where premiums are especially high. A survey by the American College of Obstetricians and Gynecologists showed that one out of eight physicians specializing in pregnancy has stopped delivering babies due to the threat of malpractice suits. Previous studies have shown that this trend hits rural areas of the nation hardest, and reports from various states confirm the shortage. A similar situation is becoming apparent at academic health centers, which provide education for health care professionals, conduct the vast majority of the nation's clinical and basic medical research, and offer patients state-of-the-art care and technology. According to the *New England Journal of Medicine*, the fear of liability suits has caused academic medical centers to change the ways in which medical students are taught and evaluated. Due to rising medical malpractice liability costs, doctors have been increasing their referrals of risky patients to specialists, and academic health centers—the end of the referral chain—may have to begin refusing treatment to some of those referred.

The New York State Court of Appeals has found that personal injury victims cannot be compensated separately for the loss of enjoyment of life. This concept—known as hedonic damages—originated as a way to calculate the cost efficiency of safety expenditures, but has been used by plaintiff lawyers to recover damages for the estates of victims who have died or are unconscious and, as a result, cannot be compensated for pain and suffering. Attorneys say that the new ruling could turn back many lower court rulings in malpractice cases, and may influence courts in other states.

The Virginia Supreme Court held in January 1989 that the state's Medical Malpractice Act—which limits awards "in any verdict returned against a health care provider"—is constitutional because it is "not arbitrary" and is "reasonable." The decision (*Etheridge vs. Medical Center Hospitals et al.*) upholds a $1 million cap on medical malpractice awards. The limit on damages is absolute, regardless of the actual amount of losses sustained by the claimant. The court also ruled that the cap covers all defendants involved in a particular negligence case, not $1 million from each defendant, as attorneys had contended.

The insurance liability crisis of the mid-1980s drew attention to the need to reform the civil justice system, in particular, the tort system which deals with liability suits. In addition, the cost of bringing a lawsuit and the time it takes to dispose of it have stimulated interest in alternatives to the traditional judicial process. These alternative dispute resolution programs (ADRs) together with the tort reform measures that have been enacted by many states (and are under consideration by others) are expected to produce significant benefits. These include a reduction in the cost of compensating plaintiffs, a better balance between the rights of plaintiffs and the rights of defendants, and an environment in which businesses and their insurers can more easily predict future liabilities.

Insurance industry trade associations have joined with members of the business community throughout the country to press for tort reforms that would restore fairness to the system. Their agenda for change is focused on four key areas:

- abolition of joint and several liability;
- modification of the collateral source rule;
- reinstitution of the state-of-the-art defense;
- and limitation on punitive damages.

State Action: In June 1989, the governor of New Hampshire signed a bill designed to modify the joint and several liability rule. It provides that defendants who are found to be less than 50 percent at fault will be liable for damages arising only from their specific actions. Joint and several liability is retained, regardless of degree of fault, in cases where parties are proven to have intentionally participated in an action which resulted in harm and in pollution cases.

In March 1989, the governor of Mississippi signed into law a tort reform package that reduces the statute of limitations for damage suit filings to three years. The new law also modifies the joint and several liability rule by allocating damages based on percentage of fault and providing that defendants with the least liability pay no more than 50 percent of the total amount if other defendants with greater liability are unable to pay.

National Action: Product liability reform legislation was again introduced in the Senate in mid–1989. The bill would establish a uniform federal law governing manufacturers' responsibilities to users of their products. It would also eliminate the practice of forum shopping—filing suit in the state in which liability laws most favor the plaintiff. Major features of the Senate bill are the establishment of a two–year statute of limitations, recovery limits for punitive damages except in cases of egregious conduct, and modification of the joint and several liability rule. A similar bill was introduced in the House. However, the House bill does not address the joint and several lia-

bility rule. Notably absent in both bills is a provision to cap noneconomic damages, an item that had been part of earlier product liability reform proposals.

Courts: Courts in seven states—Idaho, Illinois, New Hampshire, North Dakota, Ohio, Texas, and Washington—have struck down statutory limits on noneconomic damages, and in five states—California, Indiana, Virginia, Kansas, and Maryland—have upheld noneconomic damage caps.

In legislative and judicial circles, there is increasing opposition to the award of punitive damages in excess of actual damages. New Jersey and California in 1987 and Utah in 1989 enacted measures that limited punitive damages and modified the procedure for determining them. Meanwhile, judges are reducing or entirely eliminating large punitive damage awards.

However, in June 1989, the U.S. Supreme Court ruled in *Browning-Ferris Industries v. Kelco Disposal* that the 8th Amendment's ban on excessive fines is not applicable to punitive damage awards in private civil lawsuits. The Court said the ban was intended only to check government abuse of power. The decision to uphold punitive damages was seen as a major setback. The Supreme Court did not address the issue of whether the 14th Amendment would prohibit excessive damage awards under the due process clause, because the issue had not been raised in lower courts. The Court did show an interest in hearing such an argument.

A federal judge in Newark, New Jersey, has ruled that multiple punitive damage awards arising from the same harmful product are unconstitutional. The ruling, said to be the first of its kind, was made in an asbestos case. Judge H. Lee Sarokin said that allowing a jury to make unlimited punitive damage awards for the same wrongful act violates the fairness requirement of the 14th Amendment. Judge Sarokin recommended federal legislation to set standards for such awards.

Support for Reform: Many broad-based coalitions across the nation are working for tort reform. Among the largest and most influential of these is the American Tort Reform Association, whose efforts are endorsed by 400 nonprofit organizations, professional societies, trade associations, and large and small businesses.

Recent public opinion surveys suggest that the general public would favor a change in the civil justice system. A survey conducted for the Insurance Information Institute by Cambridge Reports, Inc., released in March 1989, found that while 46 percent of Americans are convinced that injured people have to sue to be compensated for losses, most also feel that suits filed by plaintiffs in civil liability cases are justified only half the time or less. Only 23 percent think they are justified more than half the time. Almost half the population thinks the amount of money awarded in civil liability suits is too high; 26 percent think awards are about right; 9 percent think they are too low. Over 62 percent favor limits on pain and

suffering awards in personal injury suits. However, in the area of product liability, two-thirds of Americans say a company should pay for damage caused by its products, even if there was no way it could have known they were potentially dangerous.

About 72 percent of the public favors the use of arbitration as an alternative way to resolve legal disputes. When asked how they would prefer their own disputes to be decided, 37 percent would choose an arbiter, 25 percent a judge, and 31 percent say it would depend on the nature of the dispute.

The Role of Lawyers: Lawyers are becoming more involved in auto injury claims, according to a study by the All-Industry Research Advisory Council (AIRAC) published in March 1989. Lawyers handle 45 percent of all auto injury claims, up from 31 percent in 1977. They handle more than half the claims in six states—California, Delaware, Louisiana, Maryland, Massachusetts and New Jersey, and the District of Columbia, which are among the 10 jurisdictions with the highest auto injury costs. AIRAC's study of 46,000 closed claims also found that, for bodily injury liability claims, 45 percent of claimants received payment within 30 days when no attorney was involved, but only 3 percent of those with attorneys received payment that quickly. All but 4.6 percent of unrepresented claimants had received a first payment within one year, while 41.5 percent of those with lawyers had received nothing.

Alternative Dispute Resolution: Tort reform is not the only way to reduce the cost of resolving legal disputes. A steadily increasing number of legal experts believe that in certain cases disagreement among parties can be settled as effectively, and at a lower cost in terms of time and money, through techniques that bypass the traditional court system. Based on arbitration or negotiation, these techniques are known as alternative dispute resolution mechanisms or ADRs. There are at least 350 ADR programs operating in 46 states, and 25 states have enacted legislation to encourage the use of ADR techniques.

According to Arbitration Forums Inc., a national nonprofit arbitration organization, there was a 9 percent increase in claims it arbitrated in 1987 and an additional 6 percent in 1988. The number of cases, in each year, nearly 250,000, represented $500 million in claims. The Forum's consumer arbitration program, the Accident Arbitration Forum, operates in 28 states.

Other forms of ADRs which are increasingly being used are: the mini-trial, a non-binding trial before key figures from both sides and a neutral adviser; and the summary jury trial. The latter takes only a few hours, much faster than a traditional trial. The lawyers for both sides present their cases without witnesses, and the jury issues a non-binding verdict to guide the litigants toward settlement options. Litigants not able to reach a settlement still have the right to a full trial.

Tort Reform Provisions

The table on the following four pages summarizes recent tort reform legislation. The column headings are explained below in the same order they appear in the table.

Joint & Several Liability: A rule under which defendants minimally responsible for injury may be liable for the full amount of the damages. Reform measures may completely eliminate the rule or modify it by limiting its application. Many states now forbid application of the rule to noneconomic damages. The measure may apply to all tort actions or to one specific type, or it may exclude one or more key areas in which the rule is commonly applied.

Punitive Damages: Originally designed to punish defendants who showed a wanton disregard for safety, punitive damages may now be imposed in a wide variety of cases and may substantially exceed compensatory damages. Reforms may require punitive damage awards to be paid to the state; set limits on the size of the award or the size relative to compensatory damages; limit the type of case in which they may be awarded; or require hearings to establish a case for punitive damages before they may be sought in court. Some states have never had provisions for punitive damages and so will not enact reforms in this area.

Periodic Payments: In most cases, judgments are lump-sum awards. Under a periodic payment (or structured settlement) system, payments are made over the lifetime of the plaintiff or for the period of disability. Periodic payments are most frequently permitted or required when damages exceed a certain amount.

Contingent Fee Regulation: Plaintiff attorneys' fees in liability cases are commonly paid on a contingency basis—the attorney receives a percentage (commonly 30 to 50 percent) of any final award or settlement. Reform may impose a sliding scale of percentages based on the size of the award or require court approval of fees above a certain amount, or mandate a flat percentage of the amount *actually recovered* by the plaintiff.

Frivolous Suit Penalties: Refers to measures to deter frivolous claims and defenses. These laws generally provide that a party found to have acted frivolously in filing or defending a suit may be liable for payment of the other party's reasonable fees and court costs.

Collateral Source Rule: A rule of evidence that bars the introduction of any information that a plaintiff's loss has been compensated by any source other than the defendant. Reform legislation may permit consideration of payments received from some or all collateral sources, require that any award be offset by the amount of those payments, or allow the defendant to introduce evidence of other compensation of the plaintiff. The jury is instructed to reduce any award for economic loss accordingly.

Government Liability: These measures limit the liability of government entities, usually by limiting or eliminating liability for govern-

ment employees and boards, or for groups under contract to the government. Other measures restrict the application of the joint and several liability rule in cases involving a government.

Dram Shop Liability: These measures generally limit the liability of sellers of liquor in dram shop actions by requiring proof of the seller's negligence or illegal serving of liquor. Some states have put caps on dram shop damages.

Noneconomic Damages Cap: A law lowering the liability of defendants by limiting recovery of a par-

MAJOR TORT REFORM MEASURES ENACTED BY

State	Joint & several liability	Punitive damages	Periodic payments	Contingent fees	Frivolous suits & defenses	Collateral source rule	Government liability	Dram shop liability
Ala.		X	X		X	X		
Alaska	X	X	X			X		
Ariz.	X						X	X
Ark.							X	
Calif.	X	X	X[2]			X[3]	X	
Colo.	X	X	M	X	X	X	X	X
Conn.	X[5]		X	X	X	X	X	
Del.								
D.C.								
Fla.	X[6]	X	X		X	X		
Ga.	X	X[8,9]			X	X	X	X
Hawaii[10]	X	X		X	X	X	X	
Idaho	X	X	X					X
Ill.	X	X			X	X	X	
Ind.					X	X	X	X
Iowa		X	X		X	X	X	X
Kans.		X	M	M		X	X	
Ky.	X	X			X	X		X
La.	X				X			
Maine			M	M			X	X
Md.			X			M	X	
Mass.			M	M		M		
Mich.	X		X		X	X	X	X
Minn.		X			X	X	X	
Miss.	X				X		X	X
Mo.	X	X	M			X		
Mont.[14]	X	X	X[15]			X	X	
Neb.					X		X	
Nev.	X[18]							

X: Indicates that a tort reform measure was enacted, but does not indicate the effectiveness or desirability of that change. M: Applies to medical malpractice only. WC: Applies to workers compensation.

[1]Including punitive damages where applicable. [2]Only for government entities. [3]Only public entities. [4]Damages up to $500,000 at court's discretion. [5]Legislation in May 1987 restored joint and several liability to economic damages. [6]For cases with damages exceeding $25,000. [7]$250,000 applicable to arbitrated cases. [8]Some measures subject to1989 sunset .

ticular type of damages (usually noneconomic damages, such as pain and suffering); by limiting the total amount of damages recoverable; or by placing an absolute cap on liability. Caps may apply to all tort suits or only to specific types.

State-of-the-Art Defense: (in the text, not the column heads): A court ordered or legislated provision which allows a defendant to show that it provided goods or services in accordance with the state of scientific and technological knowledge of the time or in compliance with government or industry standards.

STATES, 1986 THROUGH SEPTEMBER 1, 1989

Noneconomic damages cap	Remarks	State
$400,000 (M)[1]	D&O reform.	Ala.
$500,000	No damage cap for badly impaired; nonprofit D&O reform; prejudgment interest principle	Alaska
		Ariz.
		Ark.
	Product liability reform; D&O reform	Calif.
$250,000[4]	Nonprofit D&O reform; $1 million cap on damages except for physical impairment or disfigurement	Colo.
		Conn.
	Corporate D&O reform; product liability reform	Del.
		D.C.
$250,000[5,7]	No fault compensation fund for brain-damaged infants	Fla.
	Govt. suits up to insurance coverage only; nonprofit D&O, product liability reform	Ga.
$375,000	Arbitration authorized for claims under $150,000; joint & several measure excludes product, auto accident, & environment suits	Hawaii
$400,000[11]	Nonprofit D&O reform	Idaho
	Product liability reform; joint & several liability measure excludes product, medical malpractice, and environmental liabilities	Ill.
	Nonprofit D&O reform	Ind.
	Product liability reform	Iowa
$250,000[12]	Product liability, D&O reform, general $250,000 cap on non-economic damages, including medical malpractice	Kan.
		Ky.
	Product liability reform	La.
	Periodic payments on non-medical malpractice verdicts over $[illegible]	Maine
$350,000	Nonprofit D&O reform; damages cap excludes punitive damages	Md.
$500,000(M)	Exceptions to malpractice cap	Mass.
$225,000(M)	Exceptions to malpractice cap; product liability exception to joint and sev. liability measure; prejudgment interest lowered	Mich.
$400,000[13]	Nonprofit D&O reform; prejudgment interest restricted	Minn.
	Sovereign immunity reinstated	Miss.
$[illegible](M)	Product liability reform	Mo.
	Product liability reform	Mont.[14]
	Reduced prejudgment interest	Neb.
		Nev.

(Table continues)

[9]May be awarded only once for each act or omission, regardless of the number of cases arising from the act or omission. [10]$250,000 cap excludes intentional tort and product liability. [11]Subject to sunset provisions. [12]Pain and suffering damages only, not applicable to actions based on medical malpractice liability. [13]Excludes pain and suffering, disability or disfigurement. [14]Montana Supreme Court ruling may nullify some measures. [15]Optional for judgments over $100,000. [16]Major exceptions.

State	Joint & several liability	Punitive damages	Periodic payments	Contingent fees	Frivolous suits & defenses	Collateral source rule	Government liability	Dram shop liability
N.H.	X[17]	X		X	X		X	X
N.J.	X				X	X		X
N.M.	X			WC				X
N.Y.	X		X		X	X	X	
N.C.					X			
N.D.	X	X	X		X	X	X	X[18]
Ohio	X	X	X	X	X		X	
Okla.		X			X			
Ore.	X	X		X	X	X	X	X
Pa.								
R.I.			X		X	M	X	
S.C.	X	X			X		X	
S.D.	X	X	M				X	
Tenn.						X	X	
Texas	X	X			X		X	X
Utah	X	X	M				X	X
Vt.								X
Va.		X			X		X	
Wash.	X		X	X[20]	X		WC	X
W. Va.	M				M		X	
Wis.				M				
Wyo.	X				X		X	X

X: Indicates that a tort reform measure was enacted, but does not indicate the effectiveness or desirability of that change. M: Applies to medical malpractice only. WC: Applies to workers compensation. [17]Effective 1/1/90.
[18]Some measures subject to sunset provisions. [19]Includes economic damages. [20]Court has

Insurance in Home Ownership

The cost of insurance represents just 3 percent of the monthly housing expenses faced by home purchasers in the United States, according to a 1987 countrywide study by the U.S. League of Savings Institutions (USLSI). The study reflected a 6.8 percent increase from 1985 to 1987 in the median monthly housing expense after an 8.6 percent increase from 1983 to 1985.

As shown in the table opposite, the percentage of monthly expense attributable to the cost of hazard insurance increased minimally between 1983 and 1987.

The median purchase price of homes increased from $65,000 in 1983 to $95,000 in 1987, and the median downpayment rose from $12,000 to $19,850 over the same period. The USLSI said that in each of the three years covered by the study, downpayments amounted to less than 20 percent of the purchase price in more than 50 percent of all purchases. The proportion of buyers who said their monthly housing expense exceeded 25 percent of their household income dropped sharply from 40.4 percent in 1983 to 30.5 percent in 1987.

With the median age of home buyers ranging from 34.4 years in

Noneconomic damages cap	Remarks	State
$875,000	Nonprofit D&O reform; state-of-the-art, prevailing knowledge defense allowed in product liability suits	N.H.
	Product liability reform	N.J.
	Nonprofit D&O reform	N.M.
	Nonprofit D&O reform; some exceptions to joint and several measure	N.Y.
		N.C.
	Product liability reform	N.D.
X	Periodic payments allowed for $250,000 judgments	Ohio
	Prejudgment interest rate lowered	Okla.
$500,000	Product liability reform; punitive damages	Ore.
		Pa.
		R.I.
		S.C.
$1,000,000(M)[19]		S.D.
	Nonprofit D&O reform	Tenn.
	Product liability reform	Texas
$250,000(M)	Damages cap excludes punitive damages; limited state-of-the-art defense permitted	Utah
		Vt.
	Tort claims act extended to transportation districts; D&O reform; compensation fund for severely brain-damaged infants	Va.
X	Damage caps based on life expectancy and wages	Wash.
$1,000,000(M)		W.Va.
$1,000,000(M)		Wis.
	Nonprofit D&O reform	Wyo.

right to review legal fees for propriety.

Source: Compiled by Insurance Information Institute based on data from trade associations and other groups.

1983 to 37 in 1987, possession of a second income in two-adult households apparently played an influential role in the ability or decision to buy. The study showed that between 53 and 57 percent of the time, income contributed by a second earner accounted for 10 percent or more of the total household income. About one out of four home purchasers is unmarried.

MONTHLY HOUSING EXPENSES, 1983–1987

	1987		1985		1983	
Item	Cost	% of cost	Cost	% of cost	Cost	% of cost
Median purchase price	$95,000		$75,000		$65,000	
Median monthly housing expense	822		770		709	
Mortgage payment	601	73.1%	573	74.4%	524	73.9%
Real estate taxes	96	11.7	75	9.7	65	9.2
Utilities	100	12.2	100	13.0	100	14.1
Hazard insurance	25	3.0	22	2.9	20	2.8

Source: U.S. League of Savings Institutions.

Losses by Category

Fire Losses

Fire losses in the United States increased in 1988 to a record $9.6 billion from the 1987 total of $8.5 billion. The per capita fire loss rose to $39.11 from the 1987 figure of $34.96. While the trend of fire losses has been generally upward over the years, the ratio of such losses to the aggregate value of property subject to such losses has been declining for many years.

U.S. FIRE LOSSES, 1875-1988*

Year	Property loss	Loss per capita	Year	Property loss	Loss per capita
1875	$ 78,102,000	$ 1.73	1970	$2,238,000,000	$11.41
1880	74,643,000	1.49	1980	5,579,000,000	24.56
1890	108,994,000	1.73	1981	5,625,000,000	24.53
1900	160,930,000	2.12	1982	5,894,000,000	25.61
1910	214,003,000	2.32	1983	6,320,000,000	27.20
1920	447,887,000	4.21	1984	7,601,701,000	32.35
1930	501,961,000	4.08	1985	7,752,525,000	32.70
1940	286,491,000	2.16	1986	8,488,000,000	35.21
1950	648,909,000	4.27	1987	8,504,166,000	34.96
1960	1,107,824,000	6.16	1988	9,626,397,000	39.11

*Including allowances for uninsured and unreported losses.
Source: Insurance Services Office; per capita loss figures from Insurance Information Institute.

Fire Fatalities

Fire deaths in the United States totaled some 5,000 in 1988, little changed from the preceding year, according to a National Safety Council estimate. The Council said approximately 4,100, or 82 percent, of the victims perished in residential fires.

Very young children and the aged are most subject to death in fires, largely because they are less able to help themselves, but also because their lungs are more easily damaged by smoke inhalation.

Rates shown are for deaths from burns and asphyxiation, and from being struck by falling objects during fires.

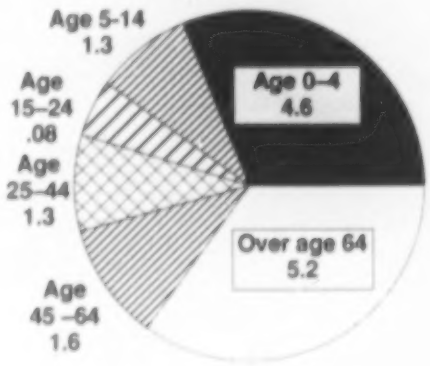
FIRE DEATH RATES BY AGE GROUP

Deaths per 100,000 Population, 1979–1988

Year	0–4	5–14	15–24	25–44	45–64	Over 64
1979	5.2	1.6	1.4	1.6	3.0	6.7
1980	5.1	1.4	1.3	1.6	2.8	6.5
1981	5.1	1.4	1.2	1.5	2.7	6.3
1982	4.5	1.4	1.1	1.4	2.3	5.6
1983	4.3	1.2	1.0	1.4	2.2	5.4
1984	4.2	1.4	1.1	1.4	2.1	5.1
1985	4.0	1.3	1.0	1.3	2.2	5.2
1986	4.2	1.3	1.0	1.3	1.9	4.8
1987	4.9	1.3	0.9	1.3	1.7	5.2
1988	4.6	1.3	0.8	1.3	1.6	5.2

Source: National Safety Council.

Deaths per 100,000 Population, 1988



Leading Causes of Fires

Defects in, or mishandling of, heating equipment causes more residential fires than any other known cause, while cooking–related fires are the second leading cause of such fires and the leading cause of injury from fires in the home.

Careless smoking is the leading known cause of residential fire deaths.

Arson is the known cause of nearly one of every four fires in non-residential structures, including schools and restaurants. Arson is also the largest known cause of monetary loss and death.

Fires of unknown cause lead all other fires in deaths and monetary loss. One explanation for this is that major fires, which are most likely to cause death and major monetary loss, are also more likely to destroy any evidence of their origins.

CAUSES OF REPORTED FIRES, 1987

Cause	Residential				Non-residential			
	Fires	Deaths	Injuries	$ loss	Fires	Deaths	Injuries	$ loss
Incendiary/suspicious	11.1%	10.6%	9.4%	15.5%	24.0%	19.0%	12.5%	22.6%
Children playing	4.3	7.6	10.1	3.8	3.1	2.5	2.0	0.5
Smoking	6.3	19.9	13.4	5.6	5.1	10.7	5.4	1.7
Heating	20.5	10.1	10.0	11.8	5.6	5.0	9.0	3.2
Cooking	17.4	5.2	20.2	7.2	5.9	2.5	6.6	1.5
Electrical distribution	7.2	6.9	6.0	9.3	9.1	2.5	9.8	7.6
Appliances, A/C	5.8	1.8	4.2	4.0	4.6	0.0	3.6	2.0
Open flame, ember	5.3	3.7	5.3	11.7	9.2	10.7	12.2	5.6
Other heat, spark	1.2	0.7	1.2	0.8	1.6	0.8	1.8	1.1
Other equipment	7.8	5.0	6.9	6.1	10.0	16.5	22.9	10.0
Natural causes	1.6	0.2	0.7	1.9	2.9	0.0	4.3	2.5
Exposure	2.9	0.4	0.6	3.2	5.6	1.7	0.5	4.4
Unknown	8.5	27.9	12.0	19.0	13.3	28.1	9.8	35.7

NOTE: Columns of figures may not add to 100 percent because of the effects of rounding.
Source: U.S. Fire Administration, Federal Emergency Management Agency.

Arson

For the third year in a row, fires originating from known or suspected arson showed a decline of greater than 5 percent, suggesting that a continuing campaign to reduce the incidence of arson has been at least moderately successful. The National Fire Protection Association (NFPA) said the estimated number of structural fires of incendiary or suspicious origin declined by 5.2 percent in 1988 after drops of 5.4 percent in 1987 and 5.1 percent in 1986. Deaths and dollar losses from such fires showed increases, however. The NFPA also reported a 3.9 percent increase in vehicular fires of incendiary or suspicious origin in 1988.

Studies have indicated that vandalism is the most common motive for arson, a conclusion supported by the fact that about one-fourth of those arrested for the offense are under age 15, and nearly half are under age 20.

Because arson—sometimes called the worst man-made disaster in the country—each year takes hundreds of lives and causes more than a billion dollars in damages, the insurance industry has helped spearhead efforts to combat it. The Insurance Committee for Arson Control serves as a catalyst for the industry's efforts and as a liaison with other groups devoted to arson control.

INCENDIARY AND SUSPICIOUS FIRES IN STRUCTURES, 1988

	Fires		Civilian deaths		Dollar loss*	
	Estimate	Change from 1987	Estimate	Change from 1987	Estimate	Change from 1987
Structural fires of incendiary origin	63,000	-3.8%	570	+22.6%	$1,022,000,000	- 7.8%
Structural fires of suspicious origin	36,500	-7.6	170	-35.9	572,000,000	+18.9
Totals	**99,500**	**-5.2**	**740**	**+ 1.4**	**1,594,000,000**	**+ 5.2**

* Includes direct property losses only; does not include indirect losses such as business interruption or temporary shelter costs. No adjustment was made for inflation in the year-to-year comparisons.
Source: National Fire Protection Association estimates.

Structural Fires

Residential fires accounted for 74 percent of structural fires in the United States in 1988, according to the National Fire Protection Association (NFPA). Residential fires also accounted for 56 percent of the dollar losses from structural fires, estimated by the NFPA at $7.188 billion. The number of structural fires in 1988, 745,000, showed a slight decrease from the 1987 figure of 758,000, but the estimated dollar loss total was 15.5 percent higher than the previous year's figure, a significant increase resulting in part from three major

industrial fires with total losses of $464 million. The NFPA said about 80 percent of civilian fire deaths and 73.4 percent of civilian fire injuries occurred in residential fires.

STRUCTURAL FIRES BY TYPE OF USE, 1988*

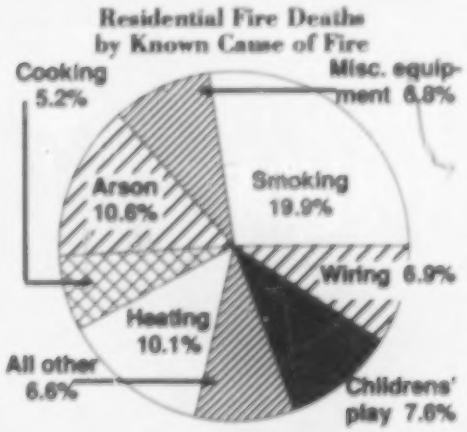
Property use	Estimated number of fires	% change from 1987	% of structural fires	% of dollar losses**
Public assembly	20,000	– 4.8%	2.7%	4.2%
Educational	10,000	– 9.1	1.3	1.6
Institutional	14,000	–26.3	1.9	0.3
Residential	552,500	+ 0.2	74.2	56.5
One- and two-family dwellings***	432,500			
Apartments	106,000			
Hotels and motels	8,000			
Other	6,000			
Stores and offices	38,000	–15.6	5.1	10.5
Industry, utility, defense	27,000	– 3.6	3.6	15.2
Storage in structures	50,000	+ 3.1	6.7	10.3
Special structures	33,500	– 1.5	4.5	2.4
Totals	**745,000**	**– 1.7**		

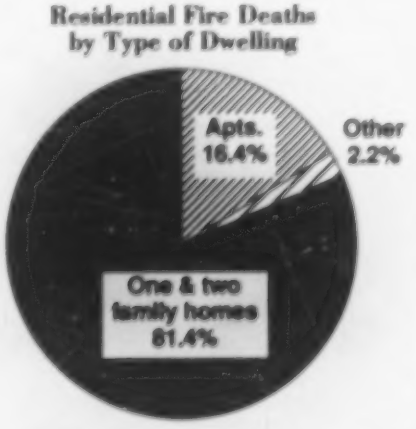
*Estimates based on data reported to the National Fire Protection Association by fire departments responding to the 1988 National Fire Experience Survey. **Direct property losses only. ***Includes mobile homes.
Source: National Fire Protection Association estimates.

CIVILIAN FIRE DEATHS AND INJURIES BY PROPERTY USE, 1988

Property use	Deaths	% change from 1987	% of all civilian fire deaths	Civilian fire injuries
Residential	5,065	+ 8.7%	81.5%	22,600
One- and two-family dwellings*	4,125	+ 9.1	66.4	17,125
Apartments	830	+ 5.1	13.4	4,950
Hotels and motels	45	–10.0	0.7	350
Other residential	65	+62.5	1.0	175
Non-residential structures	215	– 2.3	3.5	3,675
Highway vehicles	800	+ 6.0	12.9	2,750
Other vehicles**	65	+30.0	1.0	200
All other fires, incl. nonstructural	70	–44.0	1.1	1,575
Totals	**6,215**	**+ 7.0**	**100.0**	**30,800**

*Includes mobile homes. **Includes trains, boats, ships, aircraft, farm vehicles and construction vehicles.
Source: National Fire Protection Association estimates.





Multiple-Death Fires

A drunken driver in a pickup collided with a school bus to cause the most tragic fire in the United States in 1988. The collision ignited the bus's fuel tank, blocking the main side door; 27 children died. The front door and other exits permitted 42 to escape.

Altogether, in 1988, there were 33 residential fires that killed at least five people each, the NFPA reported, and 16 fires that killed more than 3 people each in nonresidential structures.

Historically, 24 fires in the United States have killed 100 or more persons, including three which claimed more than 1,000 lives each. As shown in the second table below, of the nation's 10 worst multiple-death fires, the most recent occurred more than 40 years ago when 468 persons lost their lives in Texas City, Texas, in 1947. The most tragic multiple-death fire since 1970 occurred May 28, 1977, when 165 persons died in a supper club fire in Southgate, Ky.

THE MOST TRAGIC MULTIPLE-DEATH FIRES OF 1988

Date	Location	Item burned	Deaths
May 14	Ky.	School bus	27
Feb. 2	Texas	Mobile home	8
June 7	Ohio	3-unit apartment building	8
Jan. 7	Ill.	24-unit apartment building	7
May 5	La.	Petroleum refinery	7
July 11	Ill.	6-unit apartment building	7
Aug. 20	N.J.	13-story apartment building	7

Source: National Fire Protection Association.

THE 10 WORST MULTIPLE-DEATH FIRES IN THE UNITED STATES

Date	Place	Deaths
April 27, 1865	Lower Mississippi River, SS Sultana	1,547
Oct. 8, 1871	Peshtigo, Wis., and environs	1,152
June 15, 1904	New York, N.Y., SS General Slocum	1,030
Dec. 30, 1903	Chicago, Ill., Iroquois Theater	602
Oct. 12, 1918	Cloquet, Minn., and environs	559
April 18, 1906	San Francisco, Calif., earthquake and fire	500
Nov. 28, 1942	Boston, Mass., Cocoanut Grove Night Club	492
April 16, 1947	Texas City, Tex., SS Grand and Monsanto Chemical Co.	468
Sept. 1, 1894	Hinckley, Minn., and environs	413
June 30, 1900	Hoboken, N.J., North German Lloyd pier and ships	326

Source: Compiled by the Insurance Information Institute.

Large-Loss Fires

Forty-nine fires causing damage of $5 million or more occurred in 1987, nearly twice the number recorded in 1986. They accounted for some 14 percent of the total fire damage in that year, according to the National Fire Protection Association (NFPA). The most costly fire occurred when explosions in a chemical plant near Pampa, Texas,

ignited buildings and chemicals. The fire was allowed to burn in order to consume chemicals that might otherwise have formed a toxic cloud. The dollar loss was among the worst in United States history.

Beginning with the great Chicago fire of 1871, in which more than 17,000 buildings were destroyed, at least 25 fires have caused property damage of $50 million or more in the United States. Sixteen of those fires, including five in which the damage was estimated at $100 million or more, occurred during the 1980s. Four of them occurred in 1987.

Until 1987, the NFPA labeled any fire causing $1 million or more in damage a "large-loss fire." But because inflation tends to drive up the value of property losses, the NFPA in 1987 began to count as large-loss fires only those causing losses of $5 million or more. *Insurance Facts*, which recorded large-loss fires of $5 million or more in the past, will henceforth record only those of $10 million or more.

U.S. FIRES CAUSING PROPERTY DAMAGE OF $10 MILLION OR MORE, 1987

Date	State	Property use	Esimated loss
Nov. 14	Texas	Chemical manufacturing plant	$154,000,000
Oct. 8	Texas	General warehouse	52,000,000
Jan. 12	Mass.	Manufacturing plant	50,000,000
Dec. 2	Conn.	Textile finishing plant	50,000,000
May 27	Ohio	Automotive paint warehouse	49,000,000
April 4	Calif.	Parking garage and warehouse	40,000,000
June 7	Ill.	Retail appliance store	35,000,000
Feb. 18	N. Y.	Telephone switching station	32,000,000
March 23	Mass.	Manufacturing complex	30,000,000
Aug. 30	Ore.	Forest fire	26,770,000
Nov. 3	Mich.	Business office	15,500,000
Feb. 17	Ill.	Meat product plant	15,000,000
July 8	Conn.	Garment warehouse	13,000,000
March 14	Mich.	School supply warehouse	12,000,000
Nov. 27	Mo.	General warehouse	12,000,000
Aug. 13	Texas	Electric appliance manufacturing plant	10,733,000
Oct. 27	Ga.	Chemical or plastic product warehouse	10,541,000
July 15	Ore.	Forest fire	10,256,000
April 22	Ohio	Iron and steel manufacturing plant	10,000,000
June 20	S. C.	Flammable liquid storage tank	10,000,000
July 25	Calif.	General warehouse	10,000,000

Source: National Fire Protection Association.

In terms of prevailing values, the most costly fire in the United States occurred in Passaic, N.J., on Sept. 2, 1985, with damage to residential and industrial properties estimated at some $400 million. The fire involved more than 18 acres of residential properties, destroyed 14 dwellings and 13 industrial buildings, and left more than 300 persons homeless and 2,200 unemployed. Property losses resulting from the San Francisco fire of 1906 (exclusive of heavy earthquake damage) were put at $350 million, but in terms of 1987 dollars that figure would be an estimated $4.1 billion.

THE MOST COSTLY FIRES IN UNITED STATES HISTORY

Date	Place	Property destroyed	Estimated loss
Sept. 2, 1985	Passaic, N.J.	18 industrial bldgs., 14 dwellings	$400,000,000
April 18, 1906	San Francisco, Calif.	28,000 buildings	350,000,000
Oct. 8-10, 1871	Chicago, Ill.	17,340 buildings	175,000,000
Nov. 14, 1987	Pampa, Texas	Chemical plant	154,000,000
Nov. 12, 1984	Tinker AFB, Okla.	Jet engine repair facility	138,000,000
Feb. 21, 1985	Elizabeth, N.J.	Aerosol products warehouse	123,000,000
July 23, 1984	Romeoville, Ill.	Oil refinery	100,000,000
June 6, 1982	Falls Twnshp., Pa.	Retail distribution center	100,000,000
Nov. 25, 1982	Minneapolis, Minn.	Bank building	91,000,000
July 1, 1985	Camarillo, Calif.	Wild land, 118,000 acres	75,403,000
Nov. 9, 1872	Boston, Mass.	776 buildings	75,000,000
Sept. 1, 1979	Deer Park, Texas	Tank ship	70,000,000
Nov. 28, 1981	Lynn, Mass.	31 buildings	70,000,000
July 31, 1985	Arlington Heights, Ill.	Racetrack grandstand	70,000,000
Apr. 16, 1947	Texas City, Texas	Waterfront industrial area	67,000,000
Feb. 27, 1975	New York, N.Y.	Telephone central office	56,500,000
Oct. 8, 1987	Garland, Texas	General warehouse	52,000,000
Feb. 7, 1904	Baltimore, Md.	80 city blocks in business sect.	50,000,000
Aug. 12, 1953	Livonia, Mich.	Auto transmission plant	50,000,000
Dec. 5, 1970	Linden, N.J.	Oil refinery, nearby buildings	50,000,000
Jan. 20, 1980	Borger, Texas	Refinery	50,000,000
Nov. 21, 1980	Las Vegas, Nev.	Hotel	50,000,000
Apr. 21, 1982	Anaheim, Calif.	51 buildings	50,000,000
Nov. 17, 1986	Bismarck, N.D.	Electric generating plant	50,000,000
Jan. 12, 1987	Mass.	Manufacturing complex	50,000,000
Dec. 2, 1987	Conn.	Textile finishing plant	50,000,000

Source: Compiled by the Insurance Information Institute.

The Catastrophe Record, 1988

Violent windstorms and one major explosion and fire resulted in insured losses of some $1,409,100,000 in the United States during 1988. The estimated property loss total was about 55 percent higher than 1987's unusually low $905,000,000.

A catastrophe, in the language of the insurance industry, is an event in which the insured loss appears likely to exceed $5 million. Such severe losses are most often the result of windstorms or freezing, or some other nature-related cause, but damages from a fire or explosion also can reach catastrophic proportions.

Prior to 1986, insured catastrophe losses were estimated in excess of $1 billion in each of four consecutive years, with an all-time high of $2.82 billion in 1985. The absence of heavily destructive hurricanes (two of which resulted in insured property damage of more than $962 million in 1985) helped hold catastrophe losses below the billion dollar mark in 1986 and 1987. Hurricane losses in 1988 remained low (only $50 million), but violent spring windstorms with tor-

nadoes and hail caused heavy insured losses. The only non-natural catastrophe of the year, a fire and explosion at a rocket fuel plant in Henderson, Nevada, resulted in another $100 million loss.

There were a total of 32 catastrophes affecting 33 states in 1988, compared to only 24 catastrophes in 1987. Texas was hit most often, with nine catastrophes.

THE CATASTROPHE RECORD, 1988

Date	States	Catastrophe	Estimated loss payment
Jan. 5-8	Texas, Okla., La., Ark., Miss., Ala., Ga., Tenn., S.C., N.C.	Wind, ice, snow, freezing	$46,000,000
Jan. 14-15	Nev.	Wind	7,000,000
Jan. 17-20	Calif., Ark., Miss., Tenn., Ala.	Wind, hail, snow, flooding, tornadoes	35,000,000
Feb. 16-18	Calif.	Wind	25,000,000
Mar. 1-2	Okla., Texas	Wind, hail, tornadoes	36,000,000
Mar. 28-29	Okla.	Wind, hail, tornadoes, flooding	100,000,000
Apr. 5-7	Ill., Ind., Mich.	Wind, hail, tornadoes, flooding	60,000,000
Apr. 25-26	Ala., Ga.	Wind, hail, tornadoes	90,000,000
May 4	Nev.	Explosion, fire	100,000,000
May 6-10	Colo., S.D., Neb., Kan., Iowa, Mo., Wis., Ill., Ind., Ohio, Ky., Tenn., Ala., Texas	Wind, hail, tornadoes	130,000,000
May 15-16	Okla., W.Va.	Wind, hail	75,000,000
May 19-21	Texas	Wind, hail, tornadoes	33,000,000
May 23-24	La., Miss., Ala., Ga., Fla., S.C., N.C.	Wind, hail, tornadoes	35,000,000
May 30-31	N.M.	Wind, hail, tornadoes, flooding	20,000,000
June 2-3	Texas, Okla.	Wind, hail, tornadoes	130,000,000
June 9	N.C.	Wind, hail, tornadoes	20,000,000
June 15	Colo.	Wind, hail, tornadoes	10,000,000
July 15-16	Neb., Iowa, Kan.	Wind, hail, tornadoes	37,000,000
Aug. 9	Colo.	Wind, hail, flooding	10,000,000
Sept. 5-9	Fla.	Wind, tornadoes, flooding	10,000,000
Sept. 9-10	La., Miss.	Hurricane Florence	10,000,000
Sept. 14-15	Texas	Wind, hail, tornadoes, flooding	15,000,000
Sept. 16-17	Texas	Hurricane Gilbert	40,000,000
Sept. 18	N.D., Minn.	Wind, hail	10,000,000
Sept. 25	S.C.	Wind, hail	10,000,000
Nov. 4-5	Miss., Ala., Fla., Ga., N.C.	Wind, hail, tornadoes	15,000,000
Nov. 15-16	Texas, Okla., Kan., Ark. Mo., Iowa, Ill., Ind.	Wind, hail, tornadoes	75,000,000
Nov. 22-23	Fla.	Tropical Storm Keith	30,000,000
Nov. 25-28	Texas, Ark., Miss., N.C.	Wind, hail, tornadoes	95,000,000
Dec. 7-9	Calif.	Wind	25,000,000
Dec. 14-15	Calif., Utah	Wind	50,000,000
Dec. 28	Va., Md., Pa.	Wind	25,000,000

Source: Property Claim Services Division, American Insurance Services Group, Inc.

Catastrophes during the Last Decade

Major catastrophic losses in the United States are largely associated with hurricanes. Two major hurricanes made 1985 a record year for catastrophic losses. Six of the most costly hurricanes in U.S. history occurred in the last decade. Although fewer than 2 percent of the total number of catastrophes, these six hurricanes accounted for nearly 18 percent of insured catastrophic losses.

Less than 5 percent of the decade's catastrophes were attributable to other than natural causes — fires, explosions, etc.

THE CATASTROPHE RECORD, 1979-1988

Year	Number of catastrophes			Largest single loss	Total estimated loss payments
	Natural	Other	Total		
1979	50	4	54	$752,510,000	$ 1,684,570,550
1980	46	5	51	100,000,000	1,177,022,900
1981	30	3	33	201,546,780	714,228,780
1982	30	3	33	243,500,000	1,528,419,000
1983	33	0	33	880,000,000	2,254,745,000
1984	26	0	26	276,700,000	1,548,257,500
1985	33	1	34	543,304,000	2,816,340,000
1986	26	0	26	82,000,000	871,516,250
1987	24	0	24	150,000,000	905,000,000
1988	31	1	32	130,000,000	1,409,000,000
Total	**329**	17	**346**	N.A.*	**$14,909,099,980**

*Not applicable.
Compiled by Insurance Information Institute.

Hurricanes Reaching the United States

Only two hurricanes reached the U.S. mainland during 1988, and both did relatively minor damage. "Florence," which struck Louisiana and Mississippi on Sept. 9 and 10, did only $10 million in damage to insured property. "Gilbert," one of the most powerful and destructive hurricanes in decades, devastated Jamaica, the Yucatan Peninsula, and northeast Mexico, killing hundreds, but it gave Texas only a glancing blow on Sept. 16 and 17, causing about $40 million in damages. Neither storm caused any fatalities in the United States, but Tropical Storm Chris killed one person in South Carolina on August 28.

In the last 26 years, 45 hurricanes have reached the continental United States, causing 776 deaths.

HURRICANES IN THE UNITED STATES, 1963-1988

Year	Hurricanes	Deaths*	Year	Hurricanes	Deaths*	Year	Hurricanes	Deaths*
1963	1	11	1972	1	121	1981	0	0
1964	4	49	1973	0	5	1982	0	3
1965	1	75	1974	1	1	1983	2	22
1966	2	54	1975	1	21	1984	5	4
1967	1	18	1976	1	9	1985	6	30
1968	1	9	1977	1	0	1986	4	9
1969	2	256	1978	0	35	1987	1	0
1970	1	11	1979	3	22	1988	2	1
1971	3	8	1980	1	2			

*Deaths include fatalities from high winds of less than hurricane force.
Source: Compiled by the Insurance Information Institute from data supplied by the National Oceanic and Atmospheric Administration and news reports.

THE 10 MOST COSTLY INSURED HURRICANES

Dates	Place	Hurricane	Estimated insured loss
1979, Sept. 12-14	Miss., Ala., Fla., La., Tenn., Ky., W. Va., Ohio, Pa., N.Y.	Frederic	$752,510,000
1965, Sept. 7-10	Fla., La., Miss.	Betsy	715,000,000*
1983, Aug. 17-20	Texas	Alicia	675,520,000
1985, Aug. 30-Sept. 3	Fla., Ala., Miss., La.	Elena	543,304,000
1985, Sept. 26-27	N.C., Va., Md., Del., Pa., N.J., N.Y., Conn., R.I., Mass., N.H., Vt., Me.	Gloria	418,750,000
1970, Aug. 3	Southeastern Texas	Celia	309,950,000*
1969, Aug. 17-18	La., Miss., Ala., Florida Panhandle	Camille	225,000,000*
1982, Nov. 23-24	Hawaii	Iwa	137,000,000
1954, Aug. 30-31	N.Y., Conn., R.I., Mass., Maine, N.H., N.J.	Carol	129,700,000*
1979, Aug. 30, Sept.4-6	Fla., Ga., S.C., N.C., Va., Md., D.C., Del., Pa., N.J., N.Y., Conn., Mass., P.R., V.I.	David	122,070,000

*Fixed property loss.
Source: Compiled by Insurance Information Institute from estimates provided prior to 1984 by the American Insurance Association; from 1984 to date by the Property Claim Services Division of the American Insurance Services Group Inc.

Tornadoes in the United States

After an unusually low number of tornadoes struck the United States during 1987 (656), 1988 saw a return to near average levels with 702 tornadoes. The 32 deaths attributable to tornadoes, however, made 1988 among the lowest in the 73 years for which the National Climatic Data Center has records. Property losses from tornadoes in 1988 exceeded $500 million.

During the last five years, 3,711 tornadoes have caused 322 deaths in the United States.

Tornadoes are partially seasonal, most commonly striking in the spring and summer. They are also somewhat regional, being far more common across the southern and central United States than in the West and East, although there can be yearly variations in that picture.

TORNADOES IN THE UNITED STATES, 1964–1988

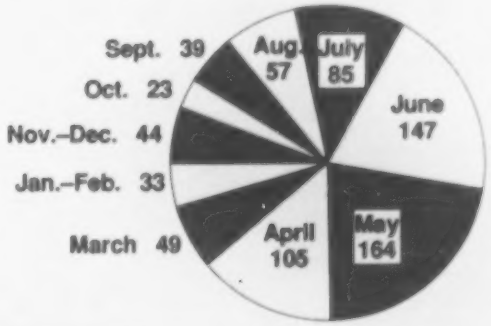
Year	Tornadoes	Deaths*	Year	Tornadoes	Deaths*	Year	Tornadoes	Deaths*
1964	704	73	1973	1,102	87	1982	1,046	64
1965	906	299	1974	947	361	1983	931	34
1966	585	98	1975	920	60	1984	907	122
1967	926	114	1976	835	44	1985	684	94
1968	660	131	1977	852	43	1986	762	15
1969	608	66	1978	788	53	1987	656	59
1970	653	72	1979	852	84	1988	702	32
1971	888	156	1980	866	28			
1972	741	27	1981	783	24			
Annual average, 73 years				**745**	**96**			

Source: National Climatic Data Center, NESDIS, NOAA, U.S. Department of Commerce.

TORNADO DEATHS AND INJURIES BY STATE, 1988

State	Tornadoes	Deaths	Injuries	State	Tornadoes	Deaths	Injuries
Alabama	16	0	59	Nebraska	20	2	1
Alaska	0	0	0	Nevada	4	0	0
Arizona	1	0	0	New Hampshire	1	0	0
Arkansas	12	6	101	New Jersey	6	0	1
California	6	0	0	New Mexico	10	0	1
Colorado	47	0	7	New York	5	1	2
Connecticut	0	0	0	North Carolina	19	4	165
Delaware	2	0	30	North Dakota	28	0	1
Dist. of Col.	0	0	0	Ohio	0	0	0
Florida	46	5	26	Oklahoma	17	1	1
Georgia	4	0	3	Oregon	0	0	0
Hawaii	2	0	0	Pennsylvania	6	0	2
Idaho	9	0	0	Rhode Island	0	0	0
Illinois	20	0	6	South Carolina	2	1	1
Indiana	13	0	8	South Dakota	5	0	0
Iowa	49	0	92	Tennessee	11	6	38
Kansas	24	0	24	Texas	89	1	22
Kentucky	4	1	15	Utah	1	0	0
Louisiana	36	0	8	Vermont	2	0	0
Maine	1	0	0	Virginia	5	0	2
Maryland	0	0	0	Washington	0	0	0
Massachusetts	0	0	0	West Virginia	0	0	0
Michigan	27	1	8	Wisconsin	35	0	4
Minnesota	5	0	0	Wyoming	13	0	2
Mississippi	62	2	33	Puerto Rico	0	0	0
Missouri	17	1	23	**Countrywide**	**702**	**32**	**688**
Montana	20	0	2				

Source: National Climatic Data Center, NESDIS, NOAA, U.S. Department of Commerce.



AVERAGE NUMBER OF TORNADOES PER MONTH, 1953–1988

Source: National Climatic Data Center, NESDIS, NOAA, U.S. Department of Commerce.

Earthquakes in the United States

Earthquakes in the United States in 1988 were all minor jolts, except for one major tremor, estimated at 7.6 on the Richter scale, in central Alaska in March. No damage was reported. A September 6, 1988, quake in eastern Kentucky, measured about 4.5 on the Richter scale and did little damage. On December 3, a 5.0 earthquake in southern California also had little effect. A 5.4 quake on June 10, 1988, caused the closing of the California Aquaduct for a few days.

While much of the nation's seismic activity is centered along the Pacific Coast and in Nevada and Alaska, every state is vulnerable to and has felt the effect of earthquakes. One of the nation's most tragic catastrophes was the San Francisco earthquake-fire of April 18, 1906, which nearly razed the city, took an estimated 500 lives, and cost some $374 million. In the East, the greatest shock was experienced in Charleston, S.C., on Aug. 31, 1886. The Charleston earthquake caused 60 deaths and $23 million in property damage.

Although insurance against earthquake damage is generally available, relatively few property owners have taken advantage of the protection it offers.

Property damage figures in the table below are given in dollar values for the year in which the earthquake occurred. NOAA said that in terms of 1981 dollars, the 1964 Alaska earthquake and tsunami (a huge sea wave caused by the quake) would show the largest magnitude of $1.19 billion. The San Fernando earthquake of 1971 would rank second at $1.05 billion. San Francisco's 1906 earthquake-fire loss would rank third.

THE 10 MOST COSTLY U.S. EARTHQUAKES*

Year	Locality	Estimated property damage
1971	San Fernando, Calif.	$553,000,000
1964	Alaska and west coast of United States (tsunami damage from earthquake near Anchorage, Alaska)	500,000,000
1987	Southern California; primarily in Los Angeles-Pasadena-Whittier area	358,000,000
1952	Kern County, Calif.	60,000,000
1933	Long Beach, Calif.	40,000,000
1983	Central California (Coalinga)	31,000,000
1979	Imperial County, Calif.	30,000,000
1960	Hawaii and west coast of United States (tsunami damage from earthquake off the coast of Chile)	25,500,000
1946	Hawaii (tsunami damage from earthquake in Aleutians)	25,000,000
1949	Puget Sound, Wash.	25,000,000

*One of history's most catastrophic occurrences, the San Francisco earthquake-fire of 1906, caused losses of some $374 million.

Source: National Geophysical Data Center, National Oceanic and Atmospheric Administration.

Motor Vehicle Accidents

The number of traffic fatalities in the United States rose slightly in 1988, according to the National Safety Council. The increase of 1.2 percent followed a 1.1 percent rise in 1987.

Data compiled by the Insurance Information Institute, however, reflected increases of less than one percent in the numbers of accidents and non-fatal injuries.

Despite the rise in traffic deaths over the last two years, the 1988 toll of 49,000 was far short of the toll of 53,524 (not a record) in 1979. Extensive state efforts to curb drunk driving through the use of stricter punishments and the lowering of the blood alcohol concentration level which defines intoxication is credited with contributing to the improvement.

On the other hand, the increases in highway fatalities over the last three years have been attributed in part to greater average driving speeds and increases in the number of miles traveled on U.S. roads (up 3.4 percent in 1988).

The economic cost of motor vehicle accidents continued to rise in 1988 because of steady increases in the costs of caring for victims, repairing damage, and providing related services. The estimated economic loss of $89 billion in 1988 was nearly 5 percent higher than the 1986 estimate of $85 billion.

The economic loss includes property damage, medical costs, lost productivity, the costs of emergency services, legal and court costs and public assistance programs, and insurance administration expenses.

MOTOR VEHICLE ACCIDENTS, 1988

Accidents*	34,200,000
Deaths**	49,000
Injuries*	5,500,000
Economic Loss***	$89,000,000,000

Sources: *Insurance Information Institute estimates; **National Safety Council; ***Insurance Information Institute estimate based on information from the National Center for Health Statistics, National Health Survey.

TRAFFIC DEATHS, 1979–1988

Year	Deaths	Annual % change	Death rate per 100 million vehicle miles	Ratio of deaths to motor vehicle registrations	Death rate per 10,000 motor vehicles
1979	53,524	+ 2.1	3.50	1 to 2,982	3.35
1980	53,172	– 0.7	3.50	1 to 3,039	3.29
1981	51,385	– 3.4	3.30	1 to 3,194	3.13
1982	45,779	–10.9	2.88	1 to 3,609	2.77
1983	44,452	– 2.9	2.68	1 to 3,811	2.62
1984	46,263	+ 4.1	2.69	1 to 3,714	2.69
1985	45,901	– 0.8	2.59	1 to 3,858	2.59
1986	47,865	+ 4.3	2.60	1 to 3,758	2.63
1987	48,400	+ 1.1	2.52	1 to 3,822	2.63
1988	49,000	+ 1.2	2.46	1 to 3,841	2.60

Source: National Safety Council (ratio of deaths to registrations compiled by Insurance Information Institute).

Motor Vehicle Deaths by State

California has by far the highest traffic fatality toll of any state, but is also below average in mileage death rates (deaths per 100 million vehicle miles). In 1988 these rates ranged from a high of 3.4 in Mississippi to a low of 1.6 in Minnesota.

MOTOR-VEHICLE DEATHS BY STATE, 1987–1988

	Number		Mileage rate*			Number		Mileage rate*	
State	1988	1987	1988	1987	State	1988	1987	1988	1987
Ala.	1,023	1,116	2.7	3.0	Mont.	198	234	2.4	2.9
Alaska	97	76	2.3	1.9	Neb.	291	297	1.9	2.3
Ariz.	944	939	3.0	3.0	Nev.	286	262	3.2	3.1
Ark.	610	639	3.2	3.5	N. H.	163	179	1.7	2.0
Calif.	5,381	5,500	2.3	2.4	N. J.	1,052	1,023	1.8	1.8
Colo.	496	591	1.8	2.2	N. M.	487	568	3.1	3.8
Conn.	486	451	1.7	1.7	N. Y.	2,237	2,327	2.3	2.4
Del.	164	147	2.6	2.4	N. C.	1,587	1,601	2.7	2.9
D. C.	63	56	1.9	1.7	N. D.	104	101	1.7	1.8
Fla.	3,092	2,891	3.1	3.1	Ohio	1,748	1,692	2.2	2.1
Ga.	1,633	1,604	2.5	2.7	Okla.	642	611	2.1	1.9
Hawaii	149	138	2.0	1.9	Ore.	677	618	3.0	2.6
Idaho	257	260	3.0	3.2	Pa.	1,932	2,006	2.4	2.6
Ill.	1,862	1,685	2.4	2.2	R. I.	125	100	2.1	1.7
Ind.	1,104	1,056	2.5	2.4	S. C.	1,034	1,087	3.1	3.6
Iowa	556	491	2.6	2.4	S. D.	147	134	2.3	2.2
Kan.	483	491	2.2	2.4	Tenn.	1,266	1,247	3.0	3.0
Ky.	840	849	2.6	2.8	Texas	3,395	3,261	2.2	2.2
La.	923	827	3.1	2.7	Utah	297	297	2.3	2.3
Maine	246	228	2.1	2.1	Vt.	128	120	2.4	2.4
Md.	793	830	2.0	2.3	Va.	1,069	1,022	1.9	1.9
Mass.	731	690	1.7	1.6	Wash.	785	790	2.0	2.1
Mich.	1,699	1,632	2.2	2.2	W. Va.	460	471	3.2	3.4
Minn.	615	530	1.6	1.5	Wis.	813	813	1.9	2.0
Miss.	722	756	3.4	3.7	Wyo.	155	129	2.7	2.4
Mo.	1,104	1,058	2.5	2.4	**Total**	**49,000**	**48,400**	**2.5**	**2.5**

*Deaths per 100 million vehicle miles.
Source: National Safety Council

Accidents by Age of Drivers

Some 32.1 percent of motor vehicle accidents in 1988 involved drivers under the age of 25, who represent only 18.6 percent of motorists. According to the National Safety Council, drivers in that age group also constituted 31.1 percent of drivers in fatal accidents.

Drivers under age 25 and over age 74 also had similar fatal accident rates—over 62 per 100,000 drivers, or nearly 50 percent more than average. Drivers under age 20 had the highest overall accident rate—39 per 100 drivers, almost twice the national average.

ACCIDENTS BY AGE OF DRIVERS, 1988

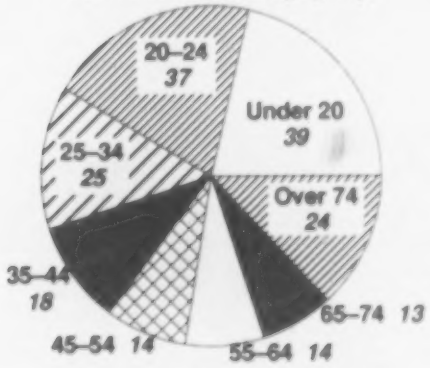
Age group	Number of drivers	% of total	Drivers in fatal accidents	% of total	Drivers in all accidents	% of total
Under 20	14,000,000	8.5	8,700	13.6	5,500,000	15.2
20-24	16,500,000	10.1	11,200	17.5	6,100,000	16.9
25-34	40,200,000	24.5	17,200	26.9	9,900,000	27.3
35-44	34,300,000	20.9	10,500	16.4	6,200,000	17.1
45-54	24,300,000	14.8	6,300	9.8	3,400,000	9.4
55-64	18,400,000	11.2	4,400	6.9	2,500,000	6.9
65-74	12,700,000	7.7	3,200	5.0	1,700,000	4.7
Over 74	3,8000,000	2.3	2,500	3.9	900,000	2.5
Totals	**164,200,000**	**100.0**	**64,000**	**100.0**	**36,200,000**	**100.0**

Source: National Safety Council.

DRIVER INVOLVEMENT RATES BY AGE GROUP

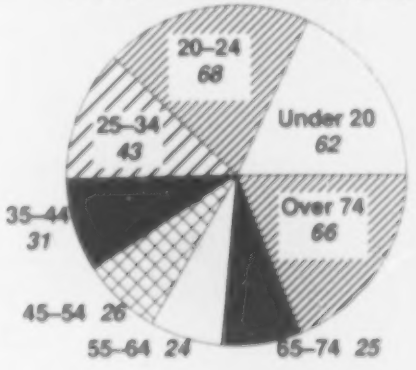
In All Accidents

Drivers in all accidents per 100 drivers in each age group.



In Fatal Accidents

Drivers in fatal accidents per 100,000 drivers in each age group.



Source: National Safety Council.

Sex of Drivers

Males comprised about 51.9 percent—some 85.2 million—of the nation's estimated 164.2 million drivers in 1988. While males were involved as drivers in almost 68 percent more accidents than were females, the National Safety Council attributes the difference at least partly to the amount of driving done by members of each sex and to differences in the times, places and circumstances that the driving is done.

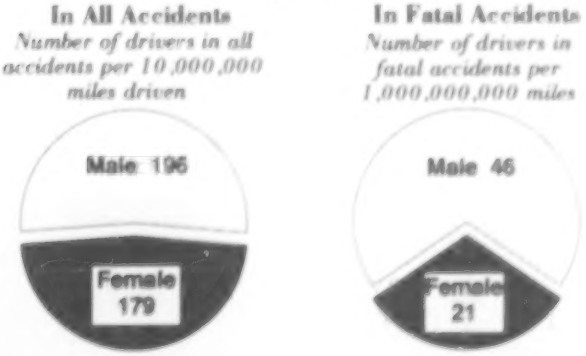
Male drivers also continued to compile a much worse fatal accident record than their female counterparts. National Safety Council data showed that male drivers were involved in fatal accidents three times more often than females; that is, for every woman driver in a fatal accident, three male drivers will be in fatal accidents. The male involvement rate in fatal accidents per one billion miles driven was more than twice that of female drivers.

SEX OF DRIVERS INVOLVED IN ACCIDENTS, 1978-1987

	Drivers in all accidents				Drivers in fatal accidents			
	Male		Female		Male		Female	
Year	Number	Rate*	Number	Rate*	Number	Rate**	Number	Rate**
1979	20,600,000	202	9,100,000	180	52,700	52	12,500	25
1980	20,100,000	200	9,700,000	192	56,100	56	12,200	24
1981	20,500,000	200	9,500,000	183	53,200	52	11,800	23
1982	20,600,000	198	9,900,000	186	48,800	47	11,500	22
1983	20,400,000	187	10,300,000	184	46,300	43	11,700	21
1984	21,800,000	192	11,200,000	190	47,600	42	13,300	23
1985	21,400,000	185	11,600,000	191	46,800	40	12,700	21
1986	22,100,000	196	12,900,000	177	46,400	41	13,100	18
1987	20,700,000	192	12,300,000	148	45,500	42	13,500	16
1988	22,500,000	204	13,700,000	155	49,200	45	14,800	17

* Number of drivers in all accidents per 10,000,000 miles driven.
**Number of drivers in fatal accidents per 1,000,000,000 miles driven.
Source: National Safety Council estimates.

MALE/FEMALE AVERAGE ACCIDENT RATES, 1979–1988


In All Accidents
Number of drivers in all accidents per 10,000,000 miles driven
Male 196
Female 179
In Fatal Accidents
Number of drivers in fatal accidents per 1,000,000,000 miles
Male 46
Female 21

The Drinking Driver

Driving while intoxicated (DWI) is responsible for some 25,000 deaths, 700,000 injuries, and up to $10 billion in insurance claims each year. While the rate of drunk driving has been on the decline for the last few years, DWI remains one of the primary causes of auto accidents and death.

Intoxication is measured most accurately by tests for blood alcohol concentration (BAC). A BAC as low as 0.02 percent affects driving and increases the possibility of accident. A BAC of 0.10 percent is the common measure of intoxication, although some states have defined a BAC of 0.08 as intoxication.

Twenty-eight states report the BAC levels of a high proportion of their fatally injured drivers and pedestrians to the Department of Transportation, along with information about the age and sex of drivers, the time and nature of the accidents, and other information. It is from that the following information is developed.

FATALLY INJURED DRIVERS AND PEDESTRIANS WITH BACS OF 0.10 OR MORE, 1979–1988

Year	Passenger vehicles	Tractor trailers	Pedestrians (*Age 16 and over*)	Motorcycles	All
1979	51%	13%	37%	44%	49%
1980	53	17	38	43	50
1981	50	15	41	47	49
1982	50	16	42	44	48
1983	48	11	38	46	46
1984	44	10	39	44	43
1985	42	5	37	42	41
1986	42	3	36	42	41
1987	41	3	35	38	39
1988	41	4	37	39	39

Source: Insurance Institute for Highway Safety

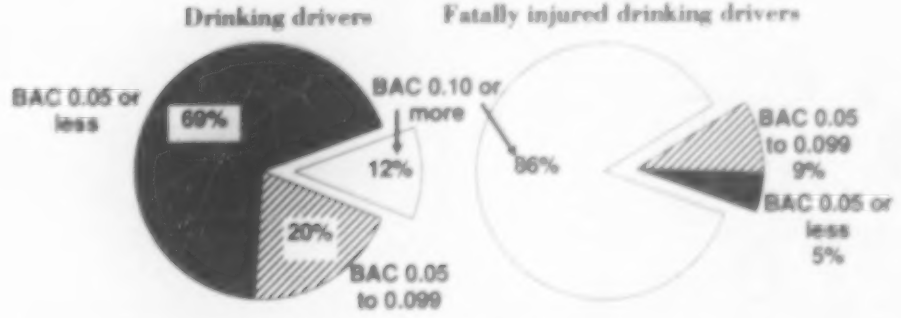
DRUNK DRIVER DEATHS, 1988*

Age	Male	Female
16–19	33%	17%
20–24	54	36
25–34	63	36
35–54	48	23
55+	18	7
All	46	23

*Fatally injured drivers of passenger cars with BAC levels of 0.10 or more as a percentage of all fatally injured drivers of passenger cars.
Source: Insurance Institute for Highway Safety

A 1986 random sample survey by the IIHS of passenger car drivers on Friday and Saturday nights between 10 pm and 3 am found that, of drivers who had been drinking, 12 percent had BACs of 0.10 percent or greater, while the Department of Transportation data show that 86 percent of passenger car drivers killed in auto accidents at those times have BACs of 0.10 or higher.

BAC LEVELS AND DEATHS OF DRINKING DRIVERS ON WEEKEND NIGHTS*



*Drinking drivers surveyed in a random sample on Friday and Saturday nights between 10 pm and 3 am in 1986; fatally injured drivers data from blood test results from accident victims in similar areas at the same times as the survey.
Source: Insurance Institute for Highway Safety.

Locations of Auto Accidents

Rural motor vehicle accidents accounted for about 64 percent of all highway fatalities but only 38 percent of non-fatal injuries in 1988, according to National Safety Council compilations.

About seven out of 10 automobile accidents occur in urban locations. Likely explanations for these disparities would include the greater road mileage and higher speeds in rural areas, lack of lighting, and perhaps a lack of warning signs.

MOTOR VEHICLE ACCIDENT RESULTS BY LOCATION, 1988

	Total	Urban	Rural
Deaths	48,700	17,500	31,200
Non-fatal injuries	1,800,000	1,120,000	680,000

Source: National Safety Council.

Auto Accident Claim Costs

The costs of insurance claim settlements and court awards resulting from auto accidents have risen steadily in recent years. From 1979 through 1988, the average paid bodily injury claim rose 145.5 percent from $3,559 to $8,736; the average paid property liability claim climbed about 114.7 percent from $715 to $1,535. At the same time the overall cost of living rose only 63.1 percent, which indicates that auto accident claims costs have increased at a greater rate than general inflation.

AVERAGE PAID CLAIM COSTS,*
LIABILITY INSURANCE, PRIVATE PASSENGER CARS

Year	Bodily injury	Property damage	Year	Bodily injury	Property damage
1979	$3,559	$715	1984	$6,163	$1,125
1980	4,010	787	1985	6,815	1,217
1981	4,453	889	1986	7,396	1,298
1982	5,041	958	1987	7,847	1,410
1983	5,699	1,020	1988	8,736	1,535

* For all limits combined and including all loss adjustment expenses. For bodily injury liability, dollar averages exclude Massachusetts (for all years) and most states which have no-fault automobile insurance laws. For property damage liability, dollar averages exclude Massachusetts, Michigan and South Carolina.
Source: Insurance Services Office.

Low-Speed Crash Tests

Crash tests of small 1989 model cars at 5 mph resulted in damages ranging from $434 to $3,444, prompting renewed criticism of a federal traffic safety agency for the weakness of current automobile bumper standards.

"Ford's 1981 Escort withstood the same tests without damage. Why don't the 1989 models?" asked Brian O'Neill, president of the Insurance Institute for Highway Safety (IIHS), which conducted the tests of 34 two-door models. "The bumpers on any car ought to prevent all damage in impacts as low as 5 miles per hour."

During the early 1980s, federal regulation required cars to pass the front and rear barrier tests without damage, but that rule was rolled back to a 2.5 mph standard by the National Highway Traffic Safety Administration (NHTSA) in 1982. IIHS noted that some cars are still built with bumpers capable of withstanding the 5 mph impacts.

"NHTSA continues to refuse to acknowledge that substantially weakened bumpers result in a much greater frequency of low speed crash damage with no substantial compensating benefits," IIHS said. "Consumers who have purchased cars with weak bumpers have been poorly served by their government."

The tests of the 1989 models, all conducted at 5 mph, involved crashing the cars' front and rear ends into a flat barrier, front ends into an angle barrier, and rear ends into a steel pole similar to those found in parking lots.

Only nine of the cars experienced no damage in the front and rear barrier tests. All the cars were damaged in the angle barrier test, and all but one, General Motors' Japanese-made Chevrolet Spectrum, in the pole impact.

REPAIR COSTS AFTER LOW SPEED (5 MPH) CRASH TESTS OF 1989 SMALL 2-DOOR CARS

Make & Model	Front into barrier	Rear into barrier	Front into angle barrier	Rear into pole	Total damage in all tests
Isuzu Impulse	$238	$507	$1,254	$1,445	$3,444
Daihatsu Charade	209	852	716	1,270	3,047
Honda CRX HF*	183	971	517	1,369	3,040
Chrysler Conquest TSi	0	0	1,472	885	2,357
Pontiac LeMans*	290	46	808	1,000	2,144
Plymouth Sundance	232	199	812	874	2,117
Volkswagen Jetta*	227	409	615	854	2,105
Honda CRX DX	395	450	730	486	2,061
Nissan 240SX XE	355	317	466	838	1,976
Volkswagen Fox*	133	583	336	835	1,887
Volkswagen GTI	171	137	540	1,027	1,875
Ford Festiva L Plus*	358	142	689	660	1,849
Acura Integra LS*	89	0	818	856	1,763
Dodge Daytona ES	0	548	308	898	1,754
Saab 900	0	195	532	946	1,673
Volkswagen Golf*	171	298	327	859	1,655

(Table continues)

Make & Model	Front into barrier	Rear into barrier	Front into angle barrier	Rear into pole	Total damage in all tests
Chevrolet Metro Coupe	$139	$106	$322	$1,053	$1,620
Ford Probe GL	18	41	385	1,148	1,592
Mercury Tracer*	0	0	712	859	1,571
Dodge Daytona	0	656	334	555	1,545
Nissan 240SX SE	0	148	480	903	1,531
Ford Escort LX	0	0	351	1,130	1,481
Mazda MX-6 DX*	0	30	204	1,231	1,465
Honda Civic 3Dr	0	171	492	599	1,262
Nissan Pulsar NX XE*	46	174	584	444	1,248
Volkswagen Cabriolet	284	0	609	251	1,144
Toyota MR2	0	0	669	422	1,091
Toyota Tercel EZ*	0	0	599	402	1,001
Mazda 323*	0	0	536	398	934
Hyundai Excel GL*	0	38	412	392	842
Mitsubishi Mirage Turbo	0	0	255	569	824
Plymouth Colt	0	0	333	309	642
Toyota Corolla*	0	0	238	257	495
Chevrolet Spectrum*	0	103	331	0	434
1981 Ford Escort	$0	$0	$0	$0	$0

* These cars were tested in 1988. Designs of the corresponding 1989 models are virtually identical, so the 1988 results are relevant to new cars. Repair costs shown hava been updated to reflect 1989 parts and labor prices.

Note: Damage repair estimates were completed in January 1989 by two independent damage appraisers using ADP Collision Estimating Services and a labor rate of $27 per hour.

Source: Insurance Institute for Highway Safety

Auto Collision Insurance Claims

Expensive sports and specialty cars continue to dominate the list of passenger vehicles with the most frequent and most costly collision insurance claims. The Highway Loss Data Institute (HLDI) said a study of the collision coverage loss experience of 1988 model passenger cars showed that of the 20 models with the poorest records, 16 were sports or specialty cars. In previous years, small models tended to predominate among those with the worst collision coverage results, but in 1988 only nine of the worst were small models, while eight were midsize, and three large. Imported models accounted for 13 of the 20.

A list of 20 cars with the best overall results included only one specialty model, the Merkur Scorpio. Only two small cars—one of them the only Japanese import—were among those with the best results.

The study also included an analysis of the frequencies and sizes of collision coverage claims for 1986 and 1987 model cars. The supporting data were provided by 13 major auto insurers.

HLDI said the study showed, as in past years, that claim frequencies, average loss payments per claim and average loss payments per insured vehicle year generally decreased with increasing vehicle size in all body style groups. Of the 1988 models, for example, the 20 with the best average loss payment results included 11 large cars of

which seven were passenger vans and two station wagons. Of the 20 with the worst results, the four non-specialty cars were small cars.

The first table below records the changing collision loss experience for automobiles of the last three model years since the cars first became available. The next table lists the 1988 models with the best and the worst collision coverage loss experience based on average loss payments per insured vehicle year. This loss experience value combines claim frequency and average loss payment per claim.

COLLISION COVERAGE INSURANCE LOSSES IN YEARS SINCE INTRODUCTION, RECENT MODEL PASSENGER CARS

	1988	1987	1986
Years since introduction	1st	2nd	3rd
Claim freq. per 100 insured vhcl. yrs.	10.3	10.2	10.1
Avg. loss payment per claim	$1,990	$1,919	$1,810
Avg. loss payment per insured vhcl. yr.	$204	$196	$183

Source: Highway Loss Data Institute.

RELATIVE AVERAGE LOSS PAYMENTS PER INSURED VEHICLE YEAR FOR 1988 PASSENGER CARS

	Best results		
Make & series	Body style*	Car size*	RALP**
Dodge Dynasty	4-Dr.	M	37
Dodge Caravan	P.V.	L	43
Plymouth Reliant	2-Dr.	M	45
Chevrolet Astro Van	P.V.	L	46
Chrysler New Yorker (E Body)	4-Dr.	M	46
GMC Safari Van	P.V.	L	47
Plymouth Voyager	P.V.	L	48
Ford Crown Victoria	S.W.	L	50
Dodge Grand Caravan	P.V.	L	51
Plymouth Grand Voyager	P.V.	L	52
Chevrolet Caprice	4-Dr.	L	56
Chrysler New Yorker 5th Ave.	4-Dr.	L	59
Merkur Scorpio	Sp.	M	61
Buick Century	4-Dr.	M	61
Ford Aerostar	P.V.	L	62
Subaru DL/GL	S.W.	S	64
Chevrolet Celebrity	4-Dr.	M	66
Chevrolet Celebrity	2-Dr.	M	66
Dodge Shadow	4-Dr.	S	67
Mercury Grand Marquis	4-Dr.	L	67

	Worst results		
Make & series	Body style*	Car size*	RALP**
Toyota Supra	Sp.	M	255
Nissan 200SX	2-Dr.	S	207
Chevrolet Corvette	Sp.	S	206
Mitsubishi Mirage	4-Dr.	S	187
Jaguar XJ-S	Sp.	M	181

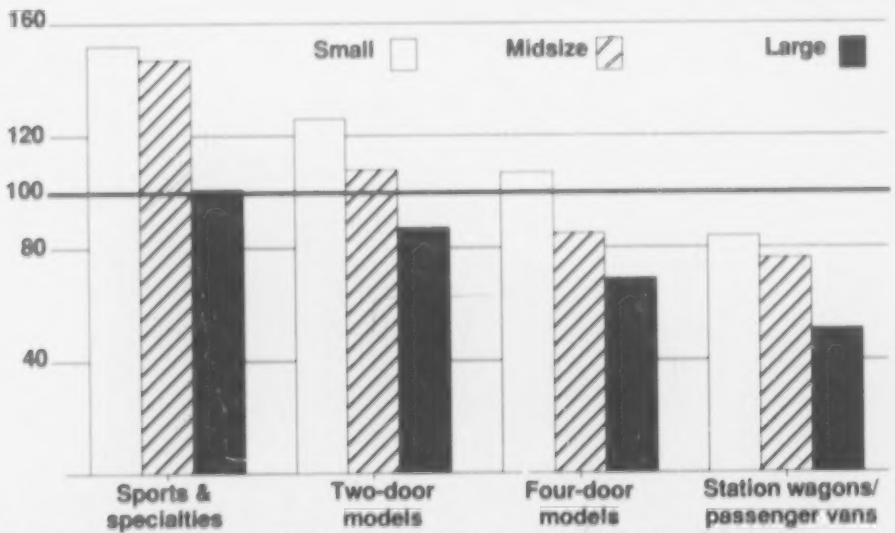
(Table continues)

*P.V. = passenger van; S.W. = station wagon; Sp. = sports or specialty. Car size = S(mall), wheelbase less than 100 inches; M(idsize), wheelbase 100 to 109 inches; L(arge), wheelbase over 109 inches.
**Relative average loss payment; 100 represents $204, the average for all 1988 passenger vehicles.

Make & series	Worst results		
	Body style*	Car size*	RALP**
Ford Mustang	Sp.	M	178
Mazda MX-6	2-Dr.	S	176
Nissan 300ZX	Sp.	S	173
Chevrolet Camaro	Sp.	M	170
Mercedes 260/300E	Sp.	L	166
Toyota MR2	Sp.	S	165
Ford EXP	Sp.	S	161
BMW 500 Series	Sp.	M	158
Ford Mustang Conv.	Sp.	M	158
Honda Civic CRX	Sp.	S	157
Jaguar XJ6	Sp.	L	157
Pontiac Firebird	Sp.	M	157
BMW 735i	Sp.	L	154
Acura Integra	4-Dr.	S	153
Oldsmobile Toronado	Sp.	M	152

*P.V. = passenger van; S.W. = station wagon; Sp. = sports or specialty. Car size = S(mall), wheelbase less than 100 inches; M(idsize), wheelbase 100 to 109 inches; L(arge), wheelbase over 109 inches.
**Relative average loss payment; 100 represents $204, the average for all 1988 passenger vehicles.
Source: Highway Loss Data Institute.

RELATIVE AVERAGE LOSS PAYMENTS ON COLLISION COVERAGES PER INSURED VEHICLE YEAR, 1988 MODELS



100 represents $204, the average for all passenger cars. **Source:** Highway Loss Data Institute.

Automobile Personal Injury Insurance Claims, Passenger Cars

The relative safety of large model cars again was underscored by the results of a 1989 study of personal injury insurance claims growing out of accidents involving 1986-1988 model passenger vehicles.

The study by the Highway Loss Data Institute (HLDI) showed that, as in past years, large models dominate the list of cars with the best overall personal injury insurance claim records.

The survey of medical claim frequencies for injuries to occupants of the late-model cars was based on "no-fault" personal injury protection experience in 19 states and the District of Columbia. Claim frequencies were calculated for all medical claims, with breakdowns of claims with medical payments exceeding $250, $500, and $1,000. Underlying data were provided by 13 automobile insurers.

Three Mercedes models, with airbag systems as standard equipment were among the top eight cars with the lowest overall claim frequency rates. As usual, the cars with the lowest claim rates tended to be the larger cars; only two small and two mid-size cars appear among the best 17 cars. On the other hand, all the cars with the worst frequency rates were small cars.

1986–1988 PASSENGER CAR RELATIVE INJURY CLAIM FREQUENCIES UNDER PERSONAL INJURY PROTECTION COVERAGES

Best results

(Blanks indicate insufficient exposure in insured vehicle years.)

Make & series	Body style**	Car size***	All	Relative claim frequencies by size of claim* Over $250	Over $500	Over $1,000
Mercedes SDL/SEL Series†	4-Dr.	L	41	41	46	
Saab 9000	4-Dr.	M	42			
Mercedes 560SL†	Conv.	S	50			
Pontiac Safari	S.W.	L	53			
Oldsmobile Custom Cruiser	S.W.	L	54	48		
Jaguar XJ6	4-Dr.	L	54	54	53	
BMW 500 Series	4-Dr.	M	55	54	55	
Mercedes 260E/300D/E†	4-Dr.	L	55	55	59	
Plymouth Grand Voyager	P.V.	L	56			
Dodge Grand Caravan	P.V.	L	57			
Ford Crown Victoria	S.W.	L	58	48		
Chevrolet Caprice	S.W.	L	58	50	52	56
Mercury Grand Marquis	S.W.	L	58			
Volvo 740/760	S.W.	L	59	54		
Toyota Camry‡	S.W.	L	59	57		
Volvo 240	S.W.	L	60	50	45	
Porsche 944	2-Dr.	S	60	67		

*Numbers represent frequency of claims relative to the value 100 which represents the average for all passenger cars.

**Conv. = Convertible; P.V. = passenger van; S.W. = station wagon.

***Car size = S(mall), wheelbase less than 100 inches; M(idsize), wheelbase 100 to 109 inches; L(arge), wheelbase over 109 inches.

†Models equipped with airbags.

‡Models equipped with motorized belt systems.

Source: Highway Loss Data Institute.

1986–1988 PASSENGER CAR RELATIVE INJURY CLAIM FREQUENCIES UNDER PERSONAL INJURY PROTECTION COVERAGES

Worst results

(Blanks indicate insufficient exposure in insured vehicle years.)

Make & series	Body style	Car size**	All	Relative claim frequencies by size of claim* Over $250	Over $500	Over $1,000
Hyundai Excel***	4-Dr.	S	189	190		
Isuzu I-Mark	2-Dr.	S	182			
Chevrolet Sprint	2-Dr.	S	178	180	182	
Chevrolet Spectrum	4-Dr.	S	176	185	186	188
Ford Escort†	2-Dr.	S	167			
Chevrolet Spectrum	2-Dr.	S	166	165	158	
Isuzu I-Mark	4-Dr.	S	164	180		
Chevrolet Sprint	4-Dr.	S	164	169	174	
Yugo	2-Dr.	S	162	171	172	176
Mitsubishi Mirage	All	S	162			
Mitsubishi Cordia	2-Dr.	S	162			
Hyundai Excel	2-Dr.	S	157	165	169	168
Ford EXP	2-Dr.	S	155	163	166	
Mitsubishi Tredia	4-Dr.	S	154			
Nissan Sentra	4-Dr.	S	153	156	158	162
Pontiac Lemans	2-Dr.	S	153			
Plymouth Colt	4-Dr.	S	152	150	155	
Nissan Sentra	2-Dr.	S	151	153	153	150
Ford Festiva	2-Dr.	S	147			
Nissan Pulsar	2-Dr.	S	145	158	158	
Dodge Colt	4-Dr.	S	143	147	152	

*Numbers represent frequency of claims relative to the value 100 which represents the average for all passenger cars.
**Car size = S(mall), wheelbase less than 100 inches
***Models equipped with nonmotorized belt systems.
†Models equipped with motorized belt systems.
Source: Highway Loss Data Institute.

Accidental Deaths

Accidents in the United States in 1988 took approximately 96,000 lives. The toll was 2 percent higher than the revised 1987 total of 94,500.

National Safety Council data showed increases in accidental deaths at home and reductions in accidental deaths at work.

ACCIDENTAL DEATHS, 1987–1988

	1988	1987	% Change
All accidents	96,000	94,500	+2
Motor vehicles	49,000	48,400	+1
Home	22,500	21,500	+5
Work	10,600	11,100	–5
Public (non-motor vehicle)	18,000	17,500	+3

Note: Death figures shown for the four separate classifications total more than the "All Accidents" figure due to rounding and because some deaths are included in more than one classification.
Source: National Safety Council.

Deaths in Home Accidents

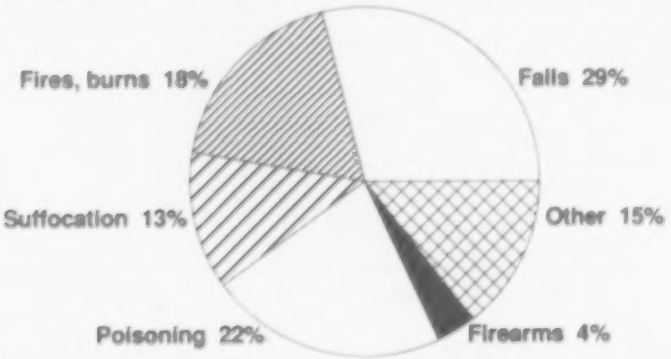
Falls and poisoning by solids and liquids accounted for approximately half of accidental deaths in the home in 1988, according to National Safety Council estimates. The number of deaths attributed to home accidents has been declining for many years, but the 1988 total of 22,500, while considerably lower than the 29,000 recorded in 1950, nevertheless saw a return to levels common a decade ago.

NUMBERS AND TYPES OF HOME ACCIDENT DEATHS, 1979-1988

			Suffocation		Poisoning by				
Year	Falls	Fires, burns*	Ingested object	Other	Solids, liquids	Gases, vapors	Firearms	Other	Total
1979	7,100	4,900	2,000	500	2,500	900	1,100	3,500	22,500
1980	7,100	4,800	2,000	500	2,500	700	1,100	4,100**	22,800
1981	6,800	4,700	2,000	500	2,600	800	1,000	3,300	21,700
1982	6,500	4,300	2,100	600	2,700	800	1,000	3,200	21,200
1983	6,500	4,100	2,200	600	2,700	800	900	3,400	21,200
1984	6,400	4,100	2,300	600	3,000	700	900	3,200	21,200
1985	6,500	4,000	2,400	600	3,200	700	900	3,300	21,600
1986	6,100	4,000	2,500	600	3,700	600	800	3,400	21,700
1987	6,400	4,200	2,200	600	3,600	600	700	3,200	21,500
1988	6,500	4,100	2,400	500	4,300	600	800	3,300	22,500

*Includes deaths resulting from conflagrations, regardless of nature of injury.
**Includes about 1,000 excessive heat deaths due to summer heat wave.
Source: National Safety Council estimates.

MOST COMMON CAUSES OF ACCIDENTAL DEATH IN THE HOME



Source: National Safety Council estimates.

Accidents at Work

Accidental deaths in the nation's workplaces continued their gradual annual decline with a drop of 500 on-the-job fatalities, to 10,600, in 1988. The modest improvement was achieved despite a rise of about 2 percent in the size of the employed labor force. The estimated number of workplace injuries was the same, 1,800,000, as

in 1987. Fatality and injury rates (incidents per 100,000 workers) both hit new low marks in 1988.

The National Safety Council estimated the dollar cost of work accidents in 1988 at a record $44.5 billion, more than 10 percent higher than the 1987 total. While the cost of work accidents generally has been rising over the years, the upward trend should be interpreted in terms of a growing work force and a steady diminution in the value of the dollar. Applying these factors in terms of a constant 1967 dollar, the cost of occupational accidents averaged $115.66 per worker in 1988 as compared to $75.36 in 1960, $87.42 in 1970 and $114.48 in 1980.

The cost of work accidents includes wages lost and medical expenses, as well as indirect losses resulting from damage to equipment and materials, production delays, time lost by workers not involved in the accident, and the administrative costs of insurance.

WORK FATALITIES AND INJURIES, 1960–1988

Year	Employed labor force (*millions*)	Fatalities	Fatalities per 100,000 workers	Injuries	Injuries per 100,000 workers
1960	65.8	13,800	21.0	1,950,000	2.964
1970	78.7	13,800	17.5	2,200,000	2,795
1980	99.3	13,200	13.3	2,200,000	2,216
1982	99.5	11,900	12.0	1,900,000	1,910
1983	100.8	11,700	11.6	1,900,000	1,885
1984	105.0	11,500	11.1	1,900,000	1,810
1985	106.4	11,500	10.8	2,000,000	1,866
1986	108.9	11,100	10.2	1,800,000	1,642
1987	111.7	11,100	9.9	1,800,000	1,611
1988	114.3	10,600	9.3	1,800,000	1,574

Sources: Bureau of Labor Statistics; National Safety Council.

ECONOMIC LOSSES FROM WORK ACCIDENTS, 1960–1988*

Year	Economic loss	Cost per worker (*1967 dollars*)	Year	Economic loss	Cost per worker (*1967 dollars*)
1960	$ 4,400,000,000	$ 75.36	1984	$30,800,000,000	$ 94.16
1970	8,000,000,000	87.42	1985	35,000,000,000	101.26
1980	28,000,000,000	114.48	1986	32,800,000,000	92.77
1982	29,400,000,000	102.21	1987	39,800,000,000	103.33
1983	31,200,000,000	103.66	1988	44,500,000,000	N.A.

*Figures do not include direct losses in business fires. N.A. = Not available.
Sources: National Safety Council; Bureau of Labor Statistics Consumer Prices.

Occupational Disease

An increasing awareness of potential disease-causing agents, especially those associated with the workplace, has focused attention in recent years on occupational diseases and ways to compensate the victims. Workers compensation, the insurance system for workplace injuries and diseases, was developed early in the twentieth century when the greatest concern was traumatic injury in accidents with

machines—fractures, lacerations, amputations. Occupational risks emerging in the latter part of the century—chemical, radioactive, electromagnetic—have posed new challenges to the insurers providing workers compensation.

Latency and Causality: The fundamental problem posed by this kind of occupational disease stems from the often long latency period between exposure and the onset of disease. The typical on-the-job injury—a hand caught in a machine—is readily apparent as an injury that occurred at a specific time as a result of a specific accident.

But with workers who contract debilitating diseases from exposure to hazardous substances, there is usually a time lag between the first exposure and the appearance of illness. While some diseases, such as skin rashes caused by exposure to caustic materials, show up in less than a year, the latency period for illnesses from exposure to carcinogenics can be a decade or more—as long as 50 years for some asbestos-related diseases.

As a result of this time lag between exposure and manifestation, workers compensation claims sometimes have been barred by statutes of limitation which begin to run at the time of exposure. Moreover, there is controversy over whether benefits should be paid at monetary levels at the time of exposure or at the higher levels prevailing when the disease appeared. There have also been disputes about when an employee's illness was contracted and who, in the employee's work history, might be responsible for the payment of benefits.

The problem is further compounded when a worker has been exposed to a substance made by more than one manufacturer, when a company has been insured by more than one insurer during the period between exposure and manifestation, and when previous employers or their insurers are no longer in business.

A further problem is that of causality. Statisticians may find a significant statistical relationship between exposures and a disease, but the direct biochemical relationship may not be known. Scientific cause-and-effect relationships are hard to prove.

Moreover, diseases associated with hazardous substances or processes usually are not attributable to a single cause. Specific kinds of cancer, for example, may be caused by use of tobacco rather than by cancer-causing substances or other hazards in the workplace.

Dealing with the Problem: Two examples of attempts to deal with these concerns are legislation passed in 1986 in New York and a May 1987 court case in California.

The New York law addressed tort and insurance reform, including a provision amending the statute of limitations for toxic substance cases. The law deals with long-latent illnesses by changing the trigger (the time the compensability "clock" begins to run) from the time of exposure to the time of discovery.

The California court decision validated the "triple trigger" theory regarding which insurers should pay the claims of thousands of asbestos victims. All policies in effect

during the periods of exposure, subsequent development, and manifestation of the disease would provide coverage.

Costs—A Look Ahead: According to the National Council on Compensation Insurance (NCCI), the extent of the occupational disease problem appears statistically to be lessening, with such cases in 1988 accounting for less than 1 percent of all workers compensation claims—down from 2 percent in 1979.

However, in the 1980s, total costs for occupational disease claims averaged $24,300, compared to about $6,800 per claim for all workers compensation. Additionally, some insurance industry experts believe the effects of technological developments and advances in disease detection could, in the decades to come, result in a sharp increase in the percentage of workers compensation cases attributable to occupational disease.

NCCI predicts that stress claims in particular will grow in relation to overall workers compensation claims as the service sector accounts for an ever-larger proportion of the U.S. economy. Not only have service-sector jobs been identified as generally more stressful than other types of employment, but today's employees also have become more aware of their rights to file claims for job-related stress.

OCCUPATIONAL DISEASE EXPERIENCE IN THE 1980S

Disease	% of all O.D. claims	Average indemnity benefit	Average medical benefit	Average total benefit
Dust diseases	4.2	$ 28,957	$ 2,226	$ 31,183
Asbestosis	4.7	17,749	2,800	20,549
Black lung	28.0	100,939	13,203	114,142
Byssinosis	0.2	17,866	2,392	20,258
Silicosis	2.5	31,398	1,901	33,299
Respiratory disorder	18.4	11,043	1,933	12,976
Poisoning, chemical	2.4	4,677	1,682	6,359
Poisoning, metal	1.5	3,903	2,130	6,033
Dermatitis	12.2	2,169	584	2,753
Mental disorders	10.1	10,836	2,069	12,905
Radiation	0.2	63,057	1,067	64,124
Hearing loss	2.5	7,413	1,641	9,054
Contagious diseases	3.4	1,922	871	2,793
Cancer	0.9	15,259	2,704	17,963
Other O.D.	8.8	8,412	1,609	10,021
All O.D. claims	100.00	21,707	2,587	24,294
O.D. claims excluding black lung		16,047	1,829	17,876

Source: National Council on Compensation Insurance.

Aircraft Accidents

At least 1,160 people died in aircraft accidents involving U.S. registered airplanes in 1988, 14 more than in the preceding year. The most tragic single incident, however, was not an accident: The explosion of a terrorist bomb aboard a Pan American Airways flight over Lockerbie, Scotland, on December 21, killed the 259 passengers and crew aboard and 11 people on the ground.

There were only two other fatal accidents involving major scheduled U.S. air flights: The breakup of a Delta Airlines jet on take off from Dallas-Fort Worth airport killed 14 and the structural failure of the passenger cabin on an Aloha Airlines flight off Hawaii killed one. The major airlines flew a record 4.17 billion miles in 1988, according to preliminary data from the National Transportation Safety Board.

Accidents involving scheduled commuter carriers cost 21 people their lives during 1988, making the year's fatal accident rate per 100,000 hours flown (0.099) the best in the last 11 years.

Fatalities and accident rates for both non-scheduled air taxis and for general aviation (private pleasure or business flying) showed little change from previous years.

AIRCRAFT ACCIDENTS IN 1988*

	Aircraft hours flown	Accidents	Fatal accidents	Fatalities	Accidents per 100,000 flight hours
U.S. airlines:					
Scheduled	10,199,000	33	3	285	0.314**
Non-scheduled	534,800	2	0	0	0.374
Scheduled comm. carriers	2,018,000	19	2	21	0.942
Non-scheduled air taxis	2,890,000	103	29	58	3.56
General aviation	29,350,000	2,357	450	796	8.03

*Preliminary data.
**The Lockerbie disaster is not included in this accident rate figure.
Source: National Transportation Safety Board.

ACCIDENTS, SCHEDULED AIRLINES, 1983-1988

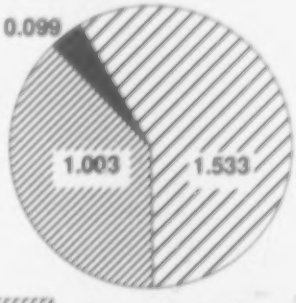
Year	Aircraft hours flown	Accidents	Fatal accidents	Fatalities	Accidents per 100,000 flight hours
1983	6,914,969	22	4	15	0.318
1984	7,736,037	13	1	4	0.168
1985	8,265,332	17	4	197	0.206
1986	9,451,541	21	2	5	0.212
1987	10,009,387	34	4	231	0.330
1988*	10,199,000	33	3	285	0.314

*Preliminary data.
Source: National Transportation Safety Board.

Fatalities per 100,000 Flight Hours

Fatal Accidents per 100,000 Flight Hours

(Fatality accident rates for scheduled and non-scheduled airlines were too small to register in these charts.)



Commuter carriers | Air taxis | General aviation

Health insurance benefit payments in the United States totaled over $264 billion in 1987, up more than 6 percent over 1986. Medicare, as usual, paid the largest single part of this bill — over 30 percent. Together, Medicare and the states' Medicaid plans paid over 47 percent of the bill, an increase of only 4.5 percent over 1986.

The shortfall in public sector payments for the higher medical benefits bill was covered by private insurers' payments. After adjustments for duplicate reporting of some costs, those payments were up 8.2 percent over 1986.

Self-insurance, health maintenance organizations (HMOs), and other miscellaneous plans increased their payments by 28.5 percent, covering nearly 18 percent of the total bill. For the first time, these "Other plans" payouts exceeded those of the Blue Cross/Blue Shield plans.

	1987	1986	% change
Private insurers	$ 69,167,000,000	$ 64,303,000,000	+ 7.6%
Blue Cross/Blue Shield	44,525,000,000	40,587,000,000	+ 9.7
Other plans*	47,300,000,000	36,800,000,000	+28.5
Private sector total**	$139,100,000,000	$128,502,000,000	+ 8.2
Medicare	79,904,000,000	76,000,000,000	+ 5.1
Medicaid	45,098,000,000	43,600,000,000	+ 3.4
Public sector total	$125,002,000,000	$119,600,000,000	+ 4.5
Totals	**$264,102,000,000**	**$248,102,000,000**	+ 6.4

* Includes Health Maintenance Organizations, employer-employee sponsored plans, etc.
** Private sector total eliminates duplications that result from private insurers and the Health Care Financing Administration ("Other plans") both reporting Administrative Services Only benefits in their data.
Sources: Health Insurance Association of America; U.S. Health Care Financing Administration.

In 1987, the average cost to hospitals per patient day ranged from $317.59 in South Dakota to $765.93 in Nevada. Alaska, where the cost of living is much higher than in the other states, posted an average per day cost of $892.02.

Nationwide, the average cost per patient day increased 7.6 percent, compared to an 8.8 percent rate of increase between 1985 and 1986. The average length of a hospital stay increased slightly, reaching 7.2 days.

AVERAGE COSTS TO HOSPITALS

State	Avg. cost to hospitals per patient day, 1987	Avg. length of stay in days, 1987	Avg. cost to hospitals per patient stay, 1987
Ala.	$460.65	7.0	$3,221.61
Alaska	892.02	5.7	5,056.92
Ariz.	710.37	5.9	4,166.85
Ark.	413.82	6.6	2,738.06
Calif.	741.91	6.4	4,755.33
Colo.	591.58	6.9	4,039.75

Table continues

State	Avg. cost to hospitals per patient day, 1987	Avg. length of stay in days, 1987	Avg. cost to hospitals per patient stay, 1987
Conn.	$612.36	7.3	$4,445.79
Del.	562.64	6.9	3,877.81
D.C.	722.13	7.8	5,636.28
Fla.	582.66	7.0	4,083.45
Ga.	456.17	6.9	3,116.21
Hawaii	512.48	7.9	4,106.04
Idaho	444.14	6.5	2,897.83
Ill.	575.25	7.4	4,227.53
Ind.	531.42	6.5	3,434.65
Iowa	401.75	8.2	3,289.93
Kan.	422.28	7.8	3,275.62
Ky.	448.49	6.4	2,833.76
La.	565.51	6.3	3,518.45
Maine	435.76	7.9	3,425.75
Md.	516.36	7.1	3,676.50
Mass.	605.28	7.7	4,623.76
Mich.	607.34	7.3	4,375.99
Minn.	426.82	9.0	3,833.96
Miss.	354.17	6.8	2,422.58
Mo.	546.44	7.5	4,088.85
Mont.	330.69	9.4	3,094.83
Neb.	370.34	9.6	3,538.82
Nev.	765.93	6.0	4,635.05
N.H.	496.19	6.4	3,137.12
N.J.	452.29	7.5	3,372.95
N.M.	578.08	5.7	3,236.46
N.Y.	493.69	9.2	4,519.58
N.C.	442.04	7.2	3,168.17
N.D.	366.56	10.1	3,596.25
Ohio	571.55	6.9	3,896.78
Okla.	518.14	6.7	3,465.04
Ore.	655.24	5.3	3,451.43
Pa.	544.16	7.5	4,059.62
R.I.	501.55	8.0	4,009.38
S.C.	433.73	7.0	3,059.91
S.D.	317.59	9.2	2,886.71
Tenn.	468.68	7.0	3,247.19
Texas	565.15	6.2	3,495.58
Utah	646.62	5.4	3,453.21
Vt.	444.62	7.4	3,274.16
Va.	475.65	7.1	3,357.79
Wash.	630.11	5.7	3,602.43
W.Va.	462.56	6.8	3,103.22
Wis.	446.26	7.5	3,326.53
Wyo.	403.39	7.1	2,848.44
Nation	**$538.96**	**7.2**	**$3,850.16**
1986	$500.81	7.1	$3,532.51

Source: American Hospital Association

Crimes against Property

Federal Bureau of Investigation data reflected a 3 percent increase in crime in 1988. Crimes against property, of which business and industry are major victims, also increased about 3 percent in 1988. Dollar losses, however, from robbery, burglary, larceny, and motor vehicle theft rose by 10 percent to more than $14.2 billion.

But the overall cost of crime is much higher when other kinds of offenses, including embezzlement, arson, and vandalism, are taken into account. In 1987, employee theft alone costs businesses an estimated $40 billion a year.

The dollar loss of major crimes against property nationwide as reported by the FBI for 1988 was:

Robbery	$343 million
Burglary	3.3 billion
Larceny-theft	3.3 billion
Motor vehicle theft	7.0 billion

The FBI also said it received complete reports on 81,063 arson offenses in 1988. The total was down almost 4 percent from the 1987 figure of 84,371, itself a 4 percent decline from 1986. Estimated dollar losses attributed to arson, however, increased about 11 percent from $907 million to more than $1.0 billion, the agency said.

States with the highest average property loss per crime were:

Robbery	N.H.	$1,978
Burglary	N.Y.	1,447
Larceny-theft	Nev.	656
Motor vehicle theft	La.	9,356

CRIMES AGAINST PROPERTY, 1979-1988*

Year	Robbery	Burglary	Larceny-theft	Year	Robbery	Burglary	Larceny-theft
1979	480,700	3,327,700	6,601,000	1984	485,010	2,984,400	6,591,900
1980	565,840	3,795,200	7,136,900	1985	497,870	3,073,300	6,926,400
1981	592,910	3,779,700	7,194,400	1986	542,780	3,241,400	7,257,200
1982	553,130	3,447,100	7,142,500	1987	517,700	3,236,200	7,499,900
1983	506,570	3,129,900	6,712,800	1988	542,970	3,218,100	7,705,900

*For the property crime of auto theft, see page 96.
Source: Federal Bureau of Investigation.

PROPERTY CRIME,
NUMBER AND LOSSES BY STATE, 1988*

State	Robbery		Burglary		Larceny-theft	
	Offenses	Dollar loss	Offenses	Dollar loss	Offenses	Dollar loss
Ala.	4,860	$ 2,677,860	50,920	$ 40,481,400	103,282	$ 41,106,236
Alaska	374	127,534	4,321	4,476,556	15,911	6,969,018
Ariz.	4,750	3,676,500	54,773	65,727,600	167,121	55,651,293
Ark.	2,037	979,797	26,443	20,098,680	60,363	21,308,139
Calif.	86,141	83,729,052	407,631	525,028,728	933,636	517,234,344
Colo.	3,250	2,158,000	45,503	53,966,558	128,331	46,712,484
Conn.	6,080	3,714,880	39,477	37,187,334	91,079	38,071,022
Del.	784	277,536	6,868	5,659,232	19,824	7,037,520
D.C.	5,690	2,310,140	12,300	9,311,100	28,624	10,075,648

(Table continues)

State	Robbery		Burglary		Larceny-theft	
	Offenses	Dollar loss	Offenses	Dollar loss	Offenses	Dollar loss
Fla.	49,916	N.A.	283,960	N.A.	589,215	N.A.
Ga.	15,593	$ 7,157,187	103,106	$ 86,712,146	223,768	$133,589,496
Hawaii	919	571,618	13,726	14,741,724	44,946	23,192,136
Idaho	202	120,796	8,691	6,361,812	26,893	7,530,040
Ill.	36,097	8,735,474	130,292	103,973,016	355,148	118,619, 32
Ind.	4,963	1,568,308	52,137	40,093,353	138,335	46,895,565
Iowa	1,132	370,164	24,211	13,969,747	79,447	21,291,796
Kan.	2,136	745,464	29,321	21,433,651	76,927	22,231,903
Ky.	2,764	N.A.	30,747	N.A.	66,711	N.A.
La.	9,238	7,750,662	63,843	50,244,441	139,141	47,864,504
Maine	311	154,256	9,852	5,881,644	28,928	8,707,328
Md.	13,994	8,242,466	54,735	51,998,250	141,509	61,556,415
Mass.	10,352	4,565,232	62,307	50,655,591	141,933	61,740,855
Mich.	22,424	10,045,952	122,254	92,301,770	305,693	104,241,313
Minn.	4,079	1,492,914	39,167	28,826,912	119,526	39,802,158
Miss.	2,028	1,354,704	33,651	22,344,264	47,818	16,497,210
Mo.	8,638	5,485,130	58,605	55,381,725	139,648	48,876,800
Mont.	182	134,680	5,657	4,802,793	25,921	9,772,217
Neb.	898	1,037,190	12,251	7,877,393	46,634	12,078,206
Nev.	3,087	2,648,846	16,376	22,779,016	37,401	24,535,056
N. H.	231	456,918	7,489	5,916,310	24,964	12,157,468
N. J.	18,927	17,431,767	75,675	71,134,500	219,086	119,182,784
N. M.	1,557	1,071,216	27,737	28,125,318	56,192	17,700,480
N. Y.	97,434	52,516,926	218,060	315,532,820	560,887	328,679,782
N. Car.	7,085	3,301,610	90,791	67,548,504	177,426	62,099,100
N. Dak.	54	75,492	2,902	1,514,844	14,007	4,776,387
Ohio	17,546	9,755,576	112,130	91,273,820	300,355	99,417,505
Okla.	3,428	3,181,184	53,624	57,967,544	96,418	36,349,586
Ore.	5,289	2,734,413	48,355	55,801,670	113,872	44,865,568
Pa.	16,607	7,855,111	83,791	75,328,109	203,362	96,393,588
R. I.	1,146	399,954	12,550	6,764,450	27,049	9,034,366
S. Car.	4,357	2,287,425	49,467	40,562,940	103,055	38,336,460
S. Dak.	87	27,231	3,703	1,688,568	13,255	2,942,610
Tenn.	8,537	4,900,238	60,894	48,776,094	106,052	46,556,828
Texas	39,301	31,598,004	361,972	427,488,932	739,642	309,170,356
Utah	915	437,370	14,896	12,246,156	71,677	18,779,374
Vt.	89	16,554	6,098	2,817,276	15,591	4,069,251
Va.	6,748	3,947,580	49,069	40,776,339	165,343	58,696,765
Wash.	6,738	2,405,466	85,711	78,168,432	201,301	64,013,718
W. Va.	644	271,124	11,510	9,587,830	25,147	9,656,448
Wis.	3,258	1,208,718	35,423	23,910,525	134,046	35,790,282
Wyo.	71	69,651	3,103	2,262,087	13,432	3,787,824

*All figures, including the numbers of offenses, are estimates.

Source: Federal Bureau of Investigation.

Arrests by Age Group

Data compiled by the Federal Bureau of Investigation show that well over half of all arrests in 1988 for burglary, robbery, and auto theft were of persons in the 15-24 age group, which comprises only 15.2 percent of the population. Members of that age group also accounted for nearly half of all arrests for larceny and drug abuse.

Persons under age 20 accounted for about 49.7 percent of all arrests for the crime of arson. Some 50 percent of all arrests for driving under the influence of intoxicants involved persons under age 30.

These FBI data, as in the past, show that persons from 15 through 24 years of age—and, to a lesser extent, persons 25 through 29—are involved in a disproportionately high number of arrests for offenses which often have a direct impact on losses paid by insurers.

ARRESTS, DISTRIBUTION BY AGE, SELECTED OFFENSES, 1988

		Burglary		Robbery		Larceny-theft	
Age group	% of total	Arrests	% of total	Arrests	% of total	Arrests	% of total
Under 15	21.6	42,376	12.8	6,470	5.8	152,952	13.2
15-19	7.4	113,845	34.3	31,740	28.5	316,672	27.2
20-24	7.8	66,420	20.0	27,305	24.5	194,520	16.7
25-29	8.9	47,645	14.4	21,386	19.2	161,687	13.9
30-34	8.9	31,102	9.4	13,294	11.9	128,645	11.1
35-39	7.8	16,782	5.1	6,433	5.8	84,499	7.3
40-44	6.6	7,341	2.2	2,746	2.5	46,752	4.0
45-49	5.3	3,166	1.0	1,091	1.0	26,393	2.3
50-54	4.5	1,535	0.5	433	0.4	16,707	1.4
55-59	4.4	832	0.3	223	0.2	12,335	1.1
60-64	4.4	364	0.1	118	0.1	8,995	0.8
65 & over	12.4	350	0.1	105	0.1	12,595	1.1
All ages	100.0	331,758	100.0*	111,344	100.0	1,162,752	100.0*

	Motor vehicle theft		Arson		Drunk driving		Drug abuse	
Age group	Arrests	% of total	Arrests	% of total	Arrests	% of total	Arrests	% of total
Under 15	15,870	10.4	4,117	28.4	403	0.0	10,077	1.2
15-19	66,236	43.3	3,085	21.3	84,346	6.5	155,307	18.3
20-24	28,793	18.8	1,982	13.7	275,440	21.3	219,180	25.8
25-29	18,781	12.3	1,706	11.8	287,393	22.2	195,200	23.0
30-34	11,744	7.7	1,275	8.8	219,147	16.9	135,683	16.0
35-39	6,224	4.1	924	6.4	151,054	11.7	74,284	8.7
40-44	2,844	1.9	531	3.7	102,410	7.9	33,635	4.0
45-49	1,295	0.8	351	2.4	66,419	5.1	14,223	1.7
50-54	581	0.4	214	1.5	42,879	3.3	6,444	0.8
55-59	339	0.2	142	1.0	29,048	2.2	3,252	0.4
60-64	152	0.1	101	0.7	18,817	1.5	1,558	0.2
65 & over	157	0.1	77	0.5	16,160	1.2	1,191	0.1
All ages	153,016	100.0*	14,505	100.0*	1,293,516	100.0*	850,034	100.0*

*Percentages do not add to total because of rounding.
Source: Federal Bureau of Investigation.

Motor Vehicle Thefts

Motor vehicle thefts in the United States increased about 11 percent from 1987 to 1988. Decreases were recorded in 13 states, but nationwide, the motor vehicle theft rate increased from 692 to 779 per 100,000 registered vehicles.

MOTOR VEHICLE REGISTRATIONS AND THEFTS, 1979-1988

Year	Motor vehicle registrations*	Thefts**	Ratio of vehicles stolen to registered	Thefts per 100,000 registrations
1979	157,226,178	1,112,800	1 in 141	708
1980	161,614,294	1,131,700	1 in 143	700
1981	164,287,643	1,087,800	1 in 151	662
1982	165,298,024	1,062,400	1 in 156	643
1983	167,718,000	1,007,900	1 in 166	601
1984	169,446,281	1,032,200	1 in 164	609
1985	175,709,000	1,102,900	1 in 159	628
1986	181,890,000	1,224,100	1 in 149	673
1987	186,137,000	1,288,700	1 in 144	692
1988	183,930,000	1,432,900	1 in 128	779

*Estimates. **Includes motorcycles.
Sources: Federal Bureau of Investigation: Federal Highway Administration.

MOTOR VEHICLE THEFTS AND DOLLAR LOSSES BY STATE, 1988*

State	Thefts	% change from 1987	Dollar loss	State	Thefts	% change from 1987	Dollar loss
Ala.	11,007	+ 2.6	$ 72,040,815	Mont.	1,740	– 9.6	$ 5,987,340
Alaska	2,334	– 8.6	10,320,948	Neb.	3,023	+14.3	10,362,844
Ariz.	15,914	+11.2	83,086,994	Nev.	6,351	+13.6	30,218,058
Ark.	5,156	+ 4.5	25,903,744	N.H.	2,498	+ 9.2	14,883,084
Calif.	265,913	+15.8	1,131,459,815	N.J.	69,046	+ 6.5	434,920,754
Colo.	13,885	– 3.4	56,928,500	N.M.	5,868	+13.6	25,059,328
Conn.	19,899	+17.1	110,379,753	N.Y.	153,898	+22.8	779,801,166
Del.	2,001	– 0.3	11,915,955	N.C.	16,340	+13.9	76,226,100
D. C.	8,633	+37.1	35,783,785	N.D.	786	– 5.1	2,895,624
Fla.**	94,694	+18.4	N.A.	Ohio	43,405	+ 5.1	219,065,035
Ga.	35,502	+15.9	196,326,060	Okla.	18,152	– 8.3	85,768,200
Hawaii	3,978	+ 0.3	15,331,212	Ore.	16,293	+28.6	59,893,068
Idaho	1,761	+ 5.4	6,503,373	Pa.	51,333	+23.2	289,312,788
Ill.	69,876	+11.8	302,213,700	R.I.	8,238	+ 6.6	43,636,686
Ind.	19,705	+ 0.5	85,598,520	S.C.	10,642	+10.6	56,817,638
Iowa	4,596	+ 7.3	13,627,140	S.D.	683	+ 0.7	2,430,797
Kan.	6,032	– 3.8	28,483,104	Tenn.	28,701	– 3.0	153,744,358
Ky.**	6,904	– 3.9	N.A.	Texas	134,256	+ 8.8	749,014,224
La.	19,929	+ 8.3	186,455,724	Utah	3,648	+ 3.7	13,326,144
Maine	2,469	+20.0	10,925,325	Vt.	1,097	+ 0.8	3,544,407
Md.	31,213	+18.3	198,421,041	Va.	18,084	+20.4	102,680,952
Mass.	52,399	– 3.2	301,503,846	Wash.	19,996	+11.5	45,210,956
Mich.	68,920	– 0.4	482,026,480	W.Va.	3,046	– 0.6	15,577,244
Minn.	14,609	+14.2	61,606,153	Wis.	13,076	+10.3	42,013,188
Miss.	4,371	+ 3.8	21,553,401	Wyo.	671	– 1.2	2,635,688
Mo.	22,325	+ 2.6	110,106,900				

*Estimated from reports. ** Estimated only, not reported.
Source: Federal Bureau of Investigation.

Insured Automobile Theft Losses

Activities of thieves who specialize in automobiles and their component parts continue to follow familiar patterns, according to the Highway Loss Data Institute (HLDI) in its continuing study of the frequency and size of insured auto theft losses. The study shows that while the most frequently victimized individual models are European-made cars, the thieves often are more interested in the cars' radios and other parts than in the vehicles themselves.

The biggest dollar losses, by far, result from thefts of sports and specialty models. HLDI said that while those cars account for only about 15 percent of the total insurance exposure, they account for more than 25 percent of all the theft claims and for about 40 percent of the total dollars paid for those claims.

The study summarized findings involving theft claims for 1988 model passenger cars during their first year of availability, 1987 models during their first two years, and 1986 models during their first three years. It took into account any theft losses paid under the comprehensive portion of automobile insurance policies, including theft of items from cars. The study was based on data provided by 13 major insurance companies.

HLDI identified 14 models with relative claim frequencies more than four times the average for all cars in at least one of the three years. Eight of the 14 were Volkswagen models, and HLDI said that except for the U.S.-made VW GTI and VW Golf, all were European imports. However, all 14 cars on the high frequency list had lower-than-average loss payments per theft claim, which suggests that many of the claims are for stolen components (radios are frequently stolen from these models) rather than for theft of the vehicles themselves. The 1986 and 1987 VW GTIs had the highest reported theft claim frequency, nearly 10 times greater than the average for all cars.

Among 12 listed cars with the highest relative average loss payments per insured vehicle year, eight were sports or specialty models. All but three had above average results for both claim frequency and average loss payment per claim. Seven of the 12 cars were domestic models, all manufactured by General Motors.

HLDI noted significant decreases in thefts of the Chevrolet Corvette, which General Motors equipped with a newly designed theft deterrent system beginning in the 1986 model year, but thefts of the 1987 model were up 45 percent, suggesting that professional thieves had found ways around the new system.

Of the 11 cars with the least frequent claims, eight were domestic models, and all were either four-door models or station wagons. All but one were small cars. The 13 cars with the lowest average loss payments per insured vehicle year were also predominantly domestic models, most of them four-door models or station wagons.

The following table reflects, for 1988, 1987, and 1986 passenger

cars, the findings by car size relative to the results for all vehicles combined, with 100 representing the average of all cars for each model year. Thus, a designation of 75 for 1988 small station wagons and passenger vans means a result which is 25 percent lower than the all-car average for 1988 models; a designation of 344 for 1988 large sports and specialty cars means a result 3.44 times higher than the average.

LOSS EXPERIENCE SUMMARY BY VEHICLE SIZE AND MODEL YEAR, THEFT LOSSES, 1986–88 PASSENGER CARS

	Relative claim frequency			Relative average loss payment per claim			Relative average loss payment per insured vehicle year		
Model year	1988	1987	1986	1988	1987	1986	1988	1987	1986
Small*									
2-door	123	117	118	58	66	66	71	78	78
4-door	167	136	122	48	56	58	81	76	71
S.W./P.V.**	75	60	48	59	70	67	44	42	32
S & S†	180	199	194	186	148	127	334	294	246
Midsize*									
2-door	73	86	85	140	162	147	103	139	126
4-door	64	62	67	82	85	79	53	53	53
S.W./P.V.**	37	41	40	53	55	49	20	23	20
S & S†	157	164	181	169	176	160	266	289	290
Large*									
2-door	N.A.	70	79	N.A.	167	110	N.A.	117	87
4-door	91	78	90	133	120	103	121	94	93
S.W./P.V.**	44	51	52	75	65	61	33	33	32
S & S†	179	208	179	193	121	120	344	252	215
All car average = 100									
Actual results	8.3‡	9.6‡	9.9‡	$2,106	$2,081	$1,958	$17.50	$20.00	$19.40

*Small = wheelbase less than 100 inches; midsize = wheelbase 100 to 109 inches; large = wheelbase more than 109 inches.
**Station wagons and passenger vans.
†Sports and specialty models.
‡Claims per 1,000 insured vehicle years.
N.A. = Not available because models have less than 5,000 insured vehicle years of exposure.
Source: Highway Loss Data Institute.

Laws Affecting Motorists

Drunk Driving Laws

The Department of Transportation estimates that removing even 10 percent of drunk drivers from the highways would result in annual savings of 2,400 lives, 53,000 injuries, and more than $1 billion in costs to society, a large portion of which is paid by insurance. Insurers have been strong supporters of anti-drunk driving measures, and many auto insurance companies offer discounts and rebates to policyholders who sign agreements not to drink and drive.

Wyoming, in 1988, became the 50th state to bar the consumption of alcoholic beverages by persons under age 21. Three other states, Colorado, Ohio and South Dakota, rescinded lower drinking ages for beer, with the result that all states now have a minimum drinking age of 21 for all alcoholic beverages.

In the last few years insurers, citizen groups, and governments have stepped up the fight against drunk driving. Most anti-DWI (driving while intoxicated) activity is now centered on increasing penalties and tightening the definition of what blood alcohol concentration (BAC) constitutes intoxication. In 1989, California and Vermont, for example, became the fourth and fifth states (after Maine, Oregon, and Utah) to define drunkenness as a BAC of 0.08 percent. Connecticut, Vermont, New Hampshire, Kansas, Maryland, Colorado, and Wyoming all enacted tighter penalties for drunk driving.

Some form of anti-DWI legislation has been enacted or introduced in every state, including provisions in all states for license suspensions for first offenders. Other measures include on-the-spot confiscation of the driver's license if his BAC exceeds a stipulated level and mandatory jail terms or public service requirements for first offenders. Further tough measures against drunk driving can be anticipated as state legislatures respond to the financial incentives approved by Congress in the Drunk Driving Act of 1988, an amendment to the Omnibus Drug Initiative Act.

At least nine states permit judges to require a convicted drunk driver to install a device in his car that measures the driver's BAC and disables the ignition if it is too high.

Many state and local police departments have initiated sobriety–check roadblock programs in an effort to curb drunk driving. Courts in 14 states have upheld such roadblocks, but they have been declared unconstitutional in 10 other states.

A summary of measures taken by the states to curb drunk driving is contained in the table on the following pages.

State	Age	1st offense license suspension	BAC defining DWI	Alcoholic beverage servers liable? by law	by court decision
Alabama	21[1]	90 days	0.10	yes	yes
Alaska	21	90 days	0.10	yes	yes
Arizona	21[1]	90 days	0.10	yes	yes
Arkansas	21	90 days	0.10		
California	21	6 mos.	0.08[6]	yes	
Colorado	21[1]	3 mos.	0.10[4]	yes	yes
Connecticut	21	1 yr.	0.10	yes	
Delaware	21	3 mos.	0.10[4]		
District of Columbia	21[1]	6 mos. (rev.)	0.10[4]		
Florida	21	6 mos.	0.10	yes	yes
Georgia	21[1]	1 yr.	0.10[4]	yes	yes
Hawaii	21	90 days	0.10		yes
Idaho	21[1]	6 mos.	0.10[4]	yes	yes
Illinois	21	1 yr. min.	0.10	yes	
Indiana	21	60 days-1 yr.	0.10		yes
Iowa	21	180 days	0.10	yes	
Kansas	21	Limited use, 90 days	0.10		
Kentucky	21	30 days-6 mos.	0.10		yes
Louisiana	21[1,2]	60 days	0.10		yes
Maine	21	90 days	0.08 (.02 under 21)	yes	
Maryland	21	60 days max.	0.10		
Massachusetts	21	45-90 days	0.10		yes
Michigan	21	6 mos.-2 yrs.	0.10	yes	
Minnesota	21	30 days	0.10	yes	
Mississippi	21	90 days-1 yr.	0.10		yes
Missouri	21	30 days	0.13[4]		yes
Montana	21[1]	6 mos.	0.10	yes	yes
Nebraska	21	6 mos.	0.10		
Nevada	21	90 days	0.10		
New Hampshire	21	90 days-2 yrs.	0.10		
New Jersey	21	6 mos.	0.10		yes
New Mexico	21	90 days	0.10 (.05 under 18)	yes	yes
New York	21	6 mos.	0.10	yes	
North Carolina	21	1 yr.	0.10	yes	yes
North Dakota	21	91 days	0.10	yes	
Ohio	21	60 days	0.10	yes	
Oklahoma	21	2-6 mos.	0.05-0.10		
Oregon	21	1 yr.	0.08	yes	yes
Pennsylvania	21	1 yr.	0.10	yes	yes
Rhode Island	21	3-6 mos.	0.10	yes	
South Carolina	21	6 mos.	0.10		
South Dakota	21	30 days	0.10		
Tennessee	21[1]	1 yr.	0.10		
Texas	21	90 days-1 yr.	0.10[4]		yes
Utah	21	90 days	0.08[4]	yes	yes
Vermont	21	3 mos.-1 yr.	0.08[7]	yes	
Virginia	21[1]	6 mos.	0.10		
Washington	21	90 days	0.10		yes
West Virginia	21[3]	6 mos.	0.10		
Wisconsin	21	6 mos.	0.10		yes
Wyoming	21	90 days	0.10	yes	yes

*All data as of July 1, 1989.

[1]"Grandfather clause;" persons under 21 reaching previous legal drinking age before a certain date retain their drinking age status; [2]18–20 year–olds permitted to drink in private homes or clubs when accompanied by parent, spouse, or guardian age 21 or older, or for medical or religious reasons; [3]Except for "non-intoxicating" beer;

TO CURB DRUNK DRIVING*

Special measures	State
Mandatory school for convicted DWIs	Ala.
Ban on "happy hours"; some local REDDI[5] lines; administrative license revocation	Alaska
Administrative license revocation	Ariz.
Governors' advisory council	Ark.
Open container law; license rev. for drivers under 21 convicted of alcohol-related crime	Calif.
Administrative license revocation; REDDI[5] line; first offense 48 hrs. jail or public service	Colo.
Administrative license revocation; 48 hrs. jail or public service for 1st offense	Conn.
Administrative license revocation	Del.
Alcohol awareness rehabilitation for first offenders; "impaired driving" citation at BAC 0.05	D. C.
Statewide rehabilitation program	Fla.
Required high school courses on drinking and driving; DWI grand jury	Ga.
Mandatory education; roadblocks; alcohol to minors by parents only	Hawaii
Mandatory treatment for DWIs; REDDI[5] hot line	Idaho
Second and subsequent offenses classified as felonies; administrative license revocation	Ill.
	Ind.
Toll-free hot line; CB radio watch; administrative license revocation	Iowa
48 hrs. to 6 mos. in jail or 100 hrs.public service and fine for 1st offense; admin. lic. rev.	Kan.
30-day susp. with educ. program, 6 mos. without; under 18 lose license 6 mos. or until 18	Ky.
Mandatory education and community service; "hardship" law; admin. license revocation	La.
48 hrs. jail if BAC over .15; under 21 lose licenses at BAC .02; admin. licens revocation	Maine
Administrative license revocation; 1 yr. suspension for 2nd offense	Md.
Ban on "happy hours"; 14 days jail for 2d offense; 1-15 yrs. for vehic. homicide; roadblocks	Mass.
	Mich.
Administrative license revocation	Minn.
Rehabilitation program with incentives (reduced suspension); admin. license revocation	Miss.
Administrative license revocation; 60-day restricted use; REDDI[5] line	Mo.
Fine, jail for first offender DWIs; increased penalties for subsequent offenses	Mont.
Trooper incentive program; REDDI[5] line	Neb.
2 days jail or public service; 3d DWI in 7 years a felony; administrative license revocation	Nev.
DWI resulting in death, up to 15 yrs. prison; resulting in serious injury, up to 7-1/2 yrs.[6]	N.H.
Auto insurance surcharge of $1,000 per yr. for 3 yrs. for 1st and 2nd offense	N.J.
Administrative suspension pending hearing; vehicles of repeat offenders impounded 90 days	N.M.
Education program; aggravated unlicensed operation an offense; 1 year rev. under 21	N.Y.
Color coding on driver licenses to better enforce drinking age; admin. license revocation	N.C.
Mandatory substance addiction evaluation for first offenders; admin. license revocation	N.D.
Educational program for first offenders; REDDI[5] program	Ohio
Governor's task force; administrative license revocation	Okla.
CB reporting system; REDDI[5] program; administrative license revocation	Ore.
Under age purchase or consumption of alcohol may result in loss of license	Pa.
Toll-free hot line; community service; 6-month susp. for teen-agers with BAC.04 or more	R.I.
Open container law; drunk drivers subject to insurance premium surcharges	S.C.
	S.D.
Mandatory education requirement	Tenn.
Mandatory education program for the first offense; hot line; open container law	Texas
Jail or community service for first offense; administrative license revocation	Utah
Admin. trative susp. at BAC .10; if BAC 0.15 in test 2 hrs. after arrest, presumed same at time of arrest	Vt.
Jail term up to 1 year; alcohol safety action program; court-ordered DWI program	Va.
Sophisticated testing procedures; toll-free hot line; CB reporting system; task force	Wash.
Administrative license suspension	W. Va.
Administrative license revocation	Wis.
REDDI[5] hot line; administrative license revocation	Wyo.

[4]Per se definition (state has lower "presumed intoxicated" BAC number); [5]REDDI is an acronym for Report Every Drunk Driver Immediately; [6]Effective Jan. 1, 1990; [7]Effective Dec. 1, 1989.
Source: Insurance Information Institute.

Automobile Financial Responsibility and Compulsory Laws

Most states have laws, commonly known as financial responsibility laws, under which a person involved in an automobile accident may be required to furnish proof of financial responsibility (usually done in the form of automobile liability insurance) up to certain minimum dollar limits. The provinces of Canada have similar laws. Mexico has no financial responsibility law as such, but requires an auto liability insurance policy written with a Mexican company.

Forty states and the District of Columbia have laws requiring registered car owners to have liability insurance or, in some cases, some other approved form of security. In 1989, only 10 states did not have one of these "compulsory" auto insurance laws—Alabama, Florida, Illinois, Mississippi, New Hampshire, Rhode Island, Tennessee, Virginia, Washington, and Wisconsin. A new compulsory insurance law went into effect in October in Florida, and one will take effect in Illinois as of January 1, 1990, leaving only eight states without such laws.

Even where ownership of automobile liability insurance is not compulsory, the existence of financial responsibility laws, along with the ever-present threat of a financially crippling judgment in the event of an accident, has come to make the possession of automobile liability insurance a virtual necessity for most motorists.

AUTOMOBILE FINANCIAL RESPONSIBILITY/COMPULSORY LIMITS

State	Liability limits*	State	Liability limits*
Alabama	20/40/10	Massachusetts	10/20/5
Alaska	50/100/25	Michigan	20/40/10
Arizona	15/30/10	Minnesota	30/60/10
Arkansas	25/50/15	Mississippi	10/20/5
California	15/30/5	Missouri	25/50/10
Colorado	25/50/15	Montana	25/50/5
Connecticut	20/40/10	Nebraska	25/50/25
Delaware	15/30/10	Nevada	15/30/10
District of Columbia	25/50/10	New Hampshire	25/50/25
Florida	10/20/5	New Jersey	15/30/5
Georgia	15/30/10	New Mexico	25/50/10
Hawaii	35/15/10	New York	10/20/5[2]
Idaho	25/50/15	North Carolina	25/50/10
Illinois	20/40/15[1]	North Dakota	25/50/25
Indiana	25/50/10	Ohio	12.5/25/7.5
Iowa	20/40/15	Oklahoma	10/20/10
Kansas	25/50/10	Oregon	25/50/10
Kentucky	25/50/10	Pennsylvania	15/30/5
Louisiana	10/20/10	Rhode Island	25/50/25
Maine	20/40/10	South Carolina	15/30/5
Maryland	20/40/10	South Dakota	25/50/25

(Table continues)

*The first two figures refer to bodily injury liability limits and the third figure to property damage liability. For example, 10/20/5 means coverage up to $20,000 for all persons injured in an accident, subject to a limit of $10,000 for one individual, and $5,000 coverage for property damage.
[1]Effective Jan. 1, 1990. [2] 50/100 if injury results in death.

State	Liability limits*	State	Liability limits*
Tennessee	20/50/10[1]	Washington	25/50/10
Texas	20/40/15	West Virginia	20/40/10
Utah	20/40/10	Wisconsin	25/50/10
Vermont	20/40/10	Wyoming	25/50/20
Virginia	25/50/20		

CANADA**

Province	Liability limit	Province	Liability limit
Alberta	$200,000	Nova Scotia	$200,000
British Columbia	200,000	Ontario	200,000
Manitoba	200,000	Prince Edward Island	200,000
New Brunswick	200,000	Quebec	50,000
Newfoundland	200,000	Saskatchewan	200,000
Northwest Territories	200,000	Yukon	200,000

*The first two figures refer to bodily injury liability limits and the third figure to property damage liability. For example, 10/20/5 means coverage up to $20,000 for all persons injured in an accident, subject to a limit of $10,000 for one individual, and $5,000 coverage for property damage.

**In all Canadian provinces except Quebec, the amount of liability insurance shown is available to settle either bodily injury or property damage claims—or both. When a claim involving both bodily injury and property damage reaches this "inclusive" limit, payment for property damage is limited to $20,000 in British Columbia, Manitoba, New Brunswick and Newfoundland, and to $10,000 in the other provinces and territories having "inclusive" limits. Quebec has a complete no-fault system for bodily injury claims, scaled down for non-residents in proportion to their degree of fault. The $50,000 limit relates to liability for damage to property in Quebec and to liability for bodily injury and property damage outside Quebec.

[1]Effective Jan. 1, 1990.

Sources: American Insurance Association; Insurance Bureau of Canada.

No-Fault Automobile Insurance

The term "no-fault" auto insurance is used loosely to denote any auto insurance program that allows the policyholder to recover losses for bodily injury from his or her own insurance company, regardless of fault. However, in its strict form, the term applies only to laws that provide for the payment of first-party benefits *and* restrict the right to sue. In this form, injured parties may sue only if the case meets certain conditions.

These conditions, the threshold, may be expressed in verbal terms or in dollar figures. The former is called a descriptive or verbal threshold and the latter a dollar or monetary threshold. Only 14 states and Puerto Rico have no-fault auto insurance laws restricting the right to sue, and only three states—Florida, Michigan, and New York—have verbal thresholds.

California voters, in November 1988, rejected Proposition 104, a no-fault initiative, but new attempts are being made to pass a no-fault law there, particularly for low-income drivers, who suffer most from delays in the tort system.

In Massachusetts, a two-year struggle to reform the state's no-fault system ended in November 1988 with the passage of a bill to raise the monetary threshold from $500 to $2,000. Earlier in the year, the legislature's joint committee on insurance had approved a measure that would have imposed a verbal threshold, but this was opposed by trial lawyers, who contended that a

verbal threshold denies accident victims their right to sue. The trial lawyers also opposed indexing the threshold to allow it to keep pace with inflation.

New Jersey modified its no-fault law in 1988. In return for premium reductions, New Jersey motorists now can choose to eliminate or reduce certain insurance benefits. For example, they can retain the right to sue or reduce their premium by agreeing to a verbal threshold.

Bills to establish no-fault laws were introduced in Maryland, Nevada, Arizona, and Pennsylvania, but the legislatures adjourned before taking any action.

Key provisions in no-fault laws vary widely. Monetary thresholds range from $400 in Connecticut to $6,000 in Hawaii. In Utah, the medical benefits limit is $3,000, while in Michigan there is no limit.

Jurisdictions which have forms of "first-party" auto insurance and the dates on which the laws originally became effective, follow. Only the first two categories, with restrictions on the right to sue, are strict no-fault laws.

FIRST PARTY LIABILITY INSURANCE LAWS

Compulsory first-party and liability insurance; some restrictions on lawsuits

Colorado, 4/1/74
Connecticut, 1/1/73
Georgia, 3/1/75
Hawaii, 9/1/74
Kansas, 1/1/74
Kentucky[1], 7/1/75
Massachusetts, 1/1/71
Michigan, 10/1/73
Minnesota, 1/1/75
New Jersey, 1/1/73 (amended 1988)
New York, 2/1/74
North Dakota, 1/1/76
Utah, 1/1/74

Compulsory first-party; optional liability insurance; some restrictions on lawsuits

Florida, 1/1/72
Puerto Rico, 1970

Compulsory first-party and liability insurance; no restrictions on lawsuits

Delaware, 1/1/72
Maryland, 1/1/73
Oregon, 1/1/72
Pennsylvania, 10/1/84[2]

Compulsory liability; optional first-party insurance; no restrictions on lawsuits

Arkansas, 7/20/87
Dist. of Col., 6/3/86[3]
South Carolina, 10/1/74
Texas, 6/17/81

Insurance not compulsory; first-party benefits optional; no restrictions on lawsuits

New Hampshire, 10/1/71
South Dakota, 1/1/72
Virginia, 1/1/72
Washington, 1973
Wisconsin, 5/18/72

[1]Kentucky has an optional no-fault system under which policyholders can accept or reject no-fault or can reject no fault and either rely on the tort system for recovery or buy personal injury protection (PIP) coverage for an additional premium.
[2]Pennsylvania's "no-fault" law, which originally included some restrictions on lawsuits, went into effect in July 1975.
[3]The District's original "no-fault" law, which included some restrictions on lawsuits, had been in effect since Oct. 1, 1983.
Source: American Insurance Association.

Automobile Seat Belt Laws

With the addition of North Dakota, South Carolina, and Wyoming in 1989, 34 states and Washington, D.C. now have laws requiring motorists to buckle up their seat belts. Oregon repealed its seat belt law by referendum in 1988.

A 1987 study by the University of North Carolina Highway Safety Research Center showed that only about 48 percent of motorists use their belts in states which have such laws. It also showed wide variations in levels of enforcement by state police, ranging from as few as 10 tickets per 100,000 population in Idaho to as many as 878 in Hawaii.

STATES WITH AUTO SEAT BELT USE LAWS

State	Effective	Penalty	Style*
California[1]	1/1/86	Max. fine $20 for 1st offense; $50 for repeaters	S
Colorado	7/1/87	$10 fine	S
Connecticut	1/1/86	$15 fine	P
Dist. of Col.	12/12/85	Max. $15 fine	S
Florida	7/1/86	$20 fine	S
Georgia	9/1/88	Max. $15 fine (driver only)	S
Hawaii	12/16/85	$20 fine	P
Idaho	7/1/86	$5 fine	S
Illinois	7/1/85	Max. $25 fine	S
Indiana	7/1/87	Max. $25 fine	S
Iowa	7/1/86	$10 fine	P
Kansas	7/1/86	Max. $10 fine	S
Louisiana	7/1/86	$25 fine	S
Maryland	7/1/86	Max. $25 fine	S
Michigan	7/1/85	$25 fine	S
Minnesota	8/1/86	$10 fine	S
Missouri	9/28/85	Max. $10 fine	S
Montana[2]	10/1/87	$20 fine	S
Nevada	7/1/87	Max. $25 fine or community service	S
New Jersey	3/1/85	$20 fine	S
New Mexico	1/1/86	Min. $25 fine; max. $50 fine	P
New York	12/1/84	Max. $50 fine	P
North Carolina	10/1/85	$25 fine	P
North Dakota	7/12/89	Warning until 12/31/90; then $20 fine	P
Ohio	5/6/86	$20 fine for drivers; $10 fine for passenger	S
Oklahoma	2/1/87	$10 fine plus $15 administrative costs	S
Pennsylvania	11/23/87	$10 fine	S
South Carolina	7/1/89	Warning until 1/1/90; then $10 fine	S
Tennessee	4/21/88	Warning for 1st offense; $25 fine for repeaters	S
Texas	9/1/85	Min. $25 fine; max. $50 fine	P
Utah	4/28/86	$10 fine	S
Virginia	1/1/88	$25 fine	S
Washington	6/11/86	$47 (fine + general fee charged all offenders)	S
Wisconsin	12/1/87	Possible $10 fine	S
Wyoming	6/8/89	No fine	S

*Enforcement style: P = Primary: Police may stop and ticket unbelted drivers; S = Secondary: Ticketing only if stopped for another offense.

[1]Law applies to front and back seat passengers as well as drivers.

[2]Montana voters rejected repeal in a 1988 referendum.

Source: Insurance Institute for Highway Safety.

Glossary & Directory

Insurance Glossary

Accident and health insurance ▪ A type of coverage that pays benefits, sometimes including reimbursement for loss of income, in case of sickness, accidental injury, or accidental death.

Actual cash value ▪ In many insurance policies, the amount awarded for property damage losses; commonly defined as replacement cost less depreciation.

Agent ▪ The *independent agent* is an independent business person who usually represents two or more insurance companies in a sales and service capacity and who is paid on a commission basis. The *exclusive agent* represents only one company, usually on a commission basis. The *direct writer* is a salaried or commissioned employee of a single company.

Allied lines ▪ A term for forms of property insurance allied with fire insurance, covering such perils as windstorm, hail, explosion, and riot.

Arson ▪ The willful and malicious burning of, or attempt to burn, any structure or other property, often with criminal or fraudulent intent.

Assets ▪ All funds, property, goods, securities, rights of action, or resources of any kind owned by an insurance company. Statutory accounting, however, excludes *non-admitted assets*, such as deferred or overdue premiums, that would be considered assets under generally accepted accounting principles (GAAP).

Automobile insurance plan ▪ One of several types of "shared market" mechanisms used to make automobile insurance available to persons who are unable to obtain such insurance in the voluntary market.

Automobile liability insurance ▪ Protection for the insured against financial loss because of legal liability for car-related injuries to others or damage to their property.

Automobile physical damage insurance ▪ Coverage to pay for damage to or loss of an insured automobile resulting from collision, fire, theft, or other perils.

Automobile reinsurance facility ▪ One of several types of "shared market" mechanisms used to make automobile insurance available to persons who are unable to obtain such insurance in the regular market.

Automobile shared market ▪ A program in which all automobile insurers in each state and the District of Columbia participate to make coverage available to car owners who are unable to obtain auto insurance in the voluntary market. Except in Maryland, which operates a state-funded mechanism whose losses are subsidized by private insurers, each state uses one of three systems (an automobile insurance plan, a joint underwriting association, or a reinsurance facility) to guarantee the availability of automobile insurance.

Aviation insurance ▪ Aircraft insurance including coverage of aircraft or their contents, the owner's liability, and accident insurance on the passengers.

Boiler and machinery insurance ▪ Coverage for loss arising out of the operation of pressure, mechanical, and electrical equipment. It covers loss of the boiler and machinery itself, damage to other property, and business interruption losses.

Broker ▪ A marketing specialist who represents buyers of property and liability insurance and who deals with either agents or companies in arranging for the coverage required by the customer.

Burglary ▪ Breaking and entering into another person's property with felonious intent.

Burglary and theft insurance ▪ Coverage against property losses due to burglary, robbery, or larceny.

Business interruption insurance ▪ Protection for a business owner against losses resulting from a temporary shutdown because of fire or other insured peril. The insurance provides reimbursement for lost net profits and necessary continuing expenses.

Capacity ▪ The amount of capital available to an insurance company or to the industry as a whole for underwriting general insurance coverage or coverage for specific perils. Generally, as insured losses increase, capacity declines, and insurance becomes less available.

Captive insurance company ▪ A company owned solely or in large part by one or more non-insurance entities for the primary purpose of providing insurance coverage to the owner or owners.

Casualty insurance ▪ Insurance concerned with the insured's legal liability for injuries to others or for damage to other persons' property; also encompasses such forms of insurance as plate glass, burglary, robbery and workers' compensation.

Catastrophe ▪ In insurance, an incident or series of related incidents causing insured property losses totaling more than $5 million.

Claim ▪ A demand to recover for a loss covered by an insurance policy.

Coinsurance ▪ A provision in an insurance policy under which the insured agrees to carry a certain amount of insurance expressed as a percentage of the value of the property. It provides for the full payment, up to the amount of the policy, of all losses if the insurance carried is at least equal to the specified percentage. If the insured fails to carry the necessary amount of insurance, he or she assumes a proportionate share of the loss.

Collision insurance ▪ An automobile insurance coverage against damage to the policyholder's vehicle caused by collision with another car or object or by upset.

Combined ratio ▪ Basically, a measure of the relationship between dollars for claims and expenses and premium dollars taken in; more specifically, the sum of the ratio of losses incurred to premiums earned and the ratio of commissions and expenses incurred to premiums written. A ratio above 100 means that for every premium dollar taken in, more than a dollar went for losses, expenses, and commissions.

Commercial lines ▪ Insurance for businesses, organizations, institutions, governmental agencies, and other commercial establishments.

Commercial multiple peril policy ▪ A package of insurance that includes a wide range of essential coverages for the commercial establishment.

Commissioner ▪ A state officer who administers the state's insurance laws and regulations. In some states, this regulator is called the director or superintendent of insurance.

Comprehensive personal liability insurance ▪ Protection against loss arising out of legal liability to pay money for damage or injury to others for which the in-

sured is responsible. It does not include automobile or business operation liabilities.

Compulsory insurance ▪ Any form of insurance which is required by law.

Coverage ▪ The scope of protection provided under a contract of insurance; any of several risks covered by a policy.

Credit insurance ▪ A guarantee to manufacturers, wholesalers, and service organizations that they will be paid for goods shipped or services rendered. Applies to that part of working capital which is represented by accounts receivable.

Crop-hail insurance ▪ Protection against damage to growing crops as a result of hail or certain other named perils.

Deductible ▪ An amount which a policyholder agrees to pay, per claim or per accident, toward the total amount of an insured loss. Insurance is written on this basis at reduced rates.

Dividend ▪ (1) An amount returned to a policyholder by an insurance company out of its earnings. (2) In capital stock companies, a share of the profits distributed to stockholders.

Earned premiums ▪ The portion of a premium which is the property of an insurance company, based on the expired portion of the policy period. E.g., a $300 premium for a one-year policy beginning July 1 would amount to an earned premium of $150 the following January 1.

Economic loss ▪ The estimated total cost, both insured and uninsured, of mishaps (such as motor vehicle accidents, work accidents, and fires); includes such factors as property damage, funeral expenses, wage loss, insurance administration costs, and medical, hospital and legal costs.

Embezzlement ▪ Fraudulent use or taking of another's property or money which has been entrusted to one's care.

Environmental impairment insurance ▪ A form of insurance designed to cover losses and liabilities arising from damage to property by pollution.

Excess and surplus insurance ▪ (1) Insurance to cover losses above a certain amount, with losses below that amount usually covered by a regular policy. (2) Insurance to cover an unusual or one-time risk, e.g., damage to a musician's hands or the multiple perils of a convention, for which coverage is unavailable in the normal market. (See also "Umbrella liability" and "Surplus lines.")

Extended coverage insurance ▪ Protection for the insured against property damage caused by windstorm, hail, smoke, explosion, riot, riot attending a strike, civil commotion, vehicle and aircraft. This is provided in conjunction with the fire insurance policy and the various "package" policies.

FAIR Plan ▪ A facility, operating under a program of the government and the insurance industry, to make fire insurance and other forms of property insurance readily available to persons and businesses for whom such insurance is not easily available or affordable.

Farmowners-ranchowners policy ▪ A package policy for a farm or a ranch, providing property and liability coverages against personal and business losses.

Federal Crime Insurance ▪ Insurance against burglary, larceny, and robbery losses offered by the federal government where the Federal Insurance Administration has determined that an insurance availability problem exists.

Fidelity bond ▪ A form of protection which reimburses an employer for losses caused by dishonest or fraudulent acts of employees.

Financial responsibility law ▪ A state law under which a person involved in an automobile accident may be required to furnish security up to certain minimum dollar limits.

Fire insurance ▪ Coverage for losses caused by fire and lightning, plus resultant damage caused by smoke and water.

Flood insurance ▪ Coverage against loss resulting from flood.

General liability insurance ▪ Coverage that pertains, for the most part, to claims arising out of the insured's liability for injuries or damage caused by ownership of property, manufacturing operations, contracting operations, sale or distribution of products, and the operation of machinery, as well as professional services.

Glass insurance ▪ Protection for loss of or damage to glass and its appurtenances.

Group insurance ▪ Any insurance plan under which a number of persons and their dependents are insured under a single policy, issued to their employer or to an association with which they are affiliated.

Guaranty fund ▪ A fund, derived from assessments against solvent insurance companies, to absorb losses of claimants against insolvent insurance companies.

Hard market ▪ That part of the insurance sales cycle in which competitive pricing is at a minimum as companies charge the premiums necessary to meet their underwriting losses in order to avoid insolvency and boost capacity; usually associated with a sharp decline in capacity (see "Soft market").

Health insurance ▪ Insurance against financial losses resulting from sickness or accidental bodily injury.

Homeowners policy ▪ A package of insurance providing home owners with a broad range of property and liability coverages.

Hurricane ▪ A tropical storm marked by extremely low barometric pressure and circular winds with a velocity of 75 miles an hour or more.

Inland marine insurance ▪ A broad form of insurance, generally covering articles in transit as well as bridges, tunnels and other means of transportation and communication. Besides goods in transit (generally excepting trans-ocean), it includes numerous "floater" policies, such as those covering personal effects, personal property, jewelry, furs, fine arts, and other items.

Insurance ▪ A system under which individuals, businesses, and other organizations or entities, in exchange for payment of a sum of money (a premium), are guaranteed compensation for losses resulting from certain perils under specified conditions.

Insurance company ▪ An organization chartered to operate as an insurer.

Insured ▪ A person or organization covered by an insurance policy, including the "named insured" and any other parties for whom protection is provided under the policy terms.

Investment income ▪ The portion of a company's income which is derived from its investments, including interest and dividends on stocks and bonds.

Joint Underwriting Association ▪ One of several types of "shared market" mechanisms used to make automobile insurance available to persons who are unable to obtain such insurance in the regular market. JUAs also have been created in some states to help alleviate availability problems in the fields of medical malpractice and commercial insurance.

Larceny-theft ▪ The unlawful taking, carrying, leading or riding away of another person's property.

Liability ▪ Any legally enforceable obligation.

Liability insurance ▪ Insurance covering the policyholder's legal liability resulting from injuries to other persons or damage to their property.

Liability limits ▪ The stipulated sum or sums beyond which an insurance company is not liable to protect the insured.

Life insurance ▪ Insurance providing for payment of a specified amount on the insured's death, either to his or her estate or to a designated beneficiary; or in the case of an endowment policy, to the policyholder at a specified date.

Loss ▪ The basis on which an insurance claim is submitted.

Malpractice insurance ▪ Coverage for a professional practitioner, such as a doctor or a lawyer, against liability claims resulting from alleged malpractice in the performance of professional services.

Marine insurance ▪ A form of insurance primarily concerned with means of transportation and communication, and with goods in transit (see "Inland marine insurance" and "Ocean marine insurance").

Medical payments insurance ▪ A coverage, available in various liability insurance policies, in which the insurer agrees to reimburse the insured and others, without regard for the insured's liability, for medical or funeral expenses incurred as the result of bodily injury or death by accident under specified conditions.

No-fault automobile insurance ▪ A form of insurance by which a person's financial losses resulting from an automobile accident are paid by his or her own insurer regardless of who was at fault.

Non-admitted insurance company ▪ An insurance company not licensed to do business in a particular state; such a company, however, may sell excess and surplus insurance in that state if admitted insurers lack the capacity or expertise.

Ocean marine insurance ▪ Insurance for sea-going vessels, including liabilities connected with them, and their cargoes.

Package policy ▪ A single insurance policy that includes several coverages.

Peril ▪ The cause of a loss insured against in a policy.

Personal lines ▪ Those types of insurance, such as auto or home insurance, for individuals or families rather than for businesses or organizations.

Policy ▪ A contract of insurance.

Policyholder ▪ A person who pays a premium to an insurance company in exchange for the insurance protection provided by a policy of insurance.

Policyholder dividends ▪ Pro rata returns of a portion of premiums paid by policyholders, usually annually and out of the insurance company's operating profits.

Policyholders' surplus ▪ Sum left after liabilities are deducted from assets. Sums such as paid-in capital and special voluntary reserves are also included in this term. This surplus is an additional financial protection to policyholders in the event a company suffers unexpected or catastrophic losses. In effect, it is the financial base that permits a company to sell insurance.

Pool ▪ An organization of insurers or reinsurers through which particular types of risk are underwritten and premiums, losses and expenses are shared in agreed-upon amounts.

Premium ▪ The sum paid for an insurance policy. Written premiums refer to the premiums for policies sold within a given time period, usually a calendar year. *Direct written premiums* are the amounts actually paid by policyholders. *Net written premiums* represent premium income retained by insurance companies, directly or through reinsurance, after payments made for reinsurance.

Premium tax ▪ A tax, imposed by each state, on the premium income of insurers doing business in the state.

Product liability insurance ▪ Protection against financial loss arising out of the legal liability incurred by a manufacturer, merchant, or distributor because of injury or damage resulting from the use of a covered product.

Property insurance ▪ Insurance providing financial protection against the loss of, or damage to, real and personal property caused by such perils as fire, theft, windstorm, hail, explosion, riot, aircraft, motor vehicles, vandalism, malicious mischief, riot and civil commotion, and smoke.

Rate ▪ The pricing factor upon which the insurance buyer's premium is based.

Ratemaking ▪ The statistical process by which insurers determine risks and pricing for the basic classes of insurance.

Regulation ▪ Supervision of business practices by a governmental entity.

Reinsurance ▪ Assumption by one insurance company of all or part of a risk undertaken by another insurance company.

Reserve ▪ (1) An amount representing liabilities kept by an insurer to cover claims and other obligations to policyholders. (2) An amount allocated for a special purpose. Note that a reserve is usually a liability and not an extra fund.

Residual market ▪ A system through which insurance is made available to buyers that represent unusually high risks.

Risk ▪ The chance of loss. Also used to refer to the insured or to property covered by a policy.

Risk retention group ▪ An alternative form of insurance in which members of a similar profession or business band together to self insure their risks.

Robbery ▪ The taking of property from a person by force or threat of violence.

Soft market ▪ That part of the insurance sales cycle in which competition is at a maximum as insurance companies use their excess capacity to sell more policies at lower prices (see "Hard market").

State fund ▪ A fund set up by a state government to provide a specific line or lines of insurance. Some states permit private insurers to compete with the state fund.

Statutory accounting ▪ Special accounting practices for insurance companies required by state law and designed to provide greater protection for the public against potential insolvency of these essential institutions.

Statutory underwriting profit or loss ▪ Premiums earned less losses and expenses.

Surety bond ▪ An agreement providing for monetary compensation in the event of a failure to perform specified acts within a stated period. The surety company, for example, becomes responsible for fulfillment of a contract if the contractor defaults.

Surplus lines ▪ (1) A risk or a part of a risk for which there is no normal insurance market available. (2) Insurance written by non-admitted insurance companies.

Tornado ▪ A whirling wind over land, accompanied by a funnel-shaped cloud. It is usually very violent and destructive in a narrow path, often for many miles.

Tort ▪ A wrongful act, resulting in injury or damage, on which a civil action may be based.

Umbrella liability ▪ Insures losses in excess of amounts covered by other liability insurance policies; also protects the insured in many situations not covered by the usual liability policies.

Underwriting ▪ The process of selecting risks for insurance and determining in what amounts and on what terms the insurance company will accept the risk.

Underwriting profit or loss ▪ The amount of money which an insurance company gains or loses as a result of its underwriting operations. A net gain or loss on underwriting operations represents a company's statutory underwriting profit less (or, if there is a loss, plus) any amount it may pay to its policyholders in the form of dividends.

Unearned premium ▪ The portion of a premium that a company has collected but has yet to earn because the policy still has unexpired time to run.

Uninsured motorist protection ▪ A form of insurance which covers the policyholder and family members if injured by a hit-and-run motorist or a driver who carries no liability insurance, assuming the other driver is at fault.

Workers compensation insurance ▪ A method of providing for the cost of medical care and income to injured employees or to dependents of those killed in industry, regardless of blame.

State Insurance Commissioners

The majority of state commissioners are appointed by state governors and serve at their pleasure. Eleven states, designated with an asterisk(*), presently elect insurance commissioners to four-year terms. California (**) will elect its insurance commissioner for the first time in November 1990 to a four-year term commencing January 1, 1991.

Alabama ▪ Mike Weaver, Commissioner of Insurance, 135 South Union St., #181, Montgomery, AL 36130-3401. Tel. 205-269-3550.

Alaska ▪ Jim Jordan, Acting Director of Insurance, P.O. Box "D", Juneau, AK 99811. Tel. 907-465-2515.

American Samoa ▪ Afa Roberts, Insurance Commissioner, Office of the Governor, Pago Pago, AS 96797. Tel. 684-633-4116.

Arizona ▪ Susan Gallinger, Director of Insurance, 3030 North 3rd St., Suite 1100, Phoenix, AZ 85012. Tel. 602-255-5400.

Arkansas ▪ Ron Taylor, Insurance Commissioner, 400 University Tower Building, 12th and University Streets, Little Rock, AR 72204. Tel. 501-371-1325.

California** ▪ Roxani Gillespie, Commissioner of Insurance, 100 Van Ness Ave., San Francisco, CA 94102. Tel. 415-557-9624; 800-233-9045.

Colorado ▪ Joanne Hill, Commissioner of Insurance, 303 W. Colfax Ave., 5th Floor, Denver, CO 80204. Tel. 303-620-4300.

Connecticut ▪ Peter F. Kelly, Insurance Commissioner, 165 Capitol Ave., State Office Bldg., Hartford, CT 06106. Tel. 203-297-3800.

Delaware* ▪ David N. Levinson, Insurance Commissioner, 841 Silver Lake Blvd., Dover, DE 19901. Tel. 302-736-4251; 800-282-8611.

District of Columbia ▪ Margurite C. Stokes, Superintendent of Insurance, 613 G St., NW, 6th Floor, Washington, DC 20001. Tel. 202-727-7424.

Florida* ▪ Tom Gallagher, Insurance Commissioner, State Capitol, Plaza Level 11, Tallahassee, FL 32399-0300. Tel. 904-488-3440; 800-342-2762.

Georgia* ▪ Warren D. Evans, Insurance Commissioner, 2 Martin L. King, Jr. Dr., Floyd Memorial Building, 716 West Tower, Atlanta, GA 30334. Tel. 404-656-2056.

Guam ▪ Joaquin G. Blaz, Acting Insurance Commissioner, P.O. Box 2796, Agana, GU 96910. Tel. 011-671-477-1040.

Hawaii ▪ Robin Campaniano, Insurance Commissioner, P.O. Box 3614, Honolulu, HA 96811. Tel. 808-548-5450; 800-548-5450.

Idaho ▪ Anthony Fagiano, Director of Insurance, 500 S. 10th St., Boise, ID 83720. Tel. 208-334-2250.

Illinois ▪ Zack Stamp, Director of Insurance, 320 W. Washington St., 4th Floor, Springfield, IL 62767. Tel. 217-782-4515.

Indiana ▪ John J. Dillon III, Commissioner of Insurance, 311 West Washington St., Suite 300, Indianapolis, IN 46204-2787. Tel. 317-232-2386; 800-622-4461.

Iowa ▪ William D. Hager, Commissioner of Insurance, Lucas State Office Building, 6th Floor, Des Moines, IA 50319. Tel. 515-281-5705.

Kansas* ▪ Fletcher Bell, Commissioner of Insurance, 420 South West Ninth St., Topeka, KS 66612. Tel. 913-296-7801; 800-432-2484.

Kentucky ▪ Leroy L. Morgan, Insurance Commissioner, 229 West Maine St., P.O. Box 517, Frankfort, KY 40602. Tel. 502-564-3630.

Louisiana* ▪ Doug Green, Commissioner of Insurance, 950 North 5th St., Baton Rouge, LA 70802. Tel. 504-342-5328.

Maine ▪ Joseph A. Edwards, Superintendent of Insurance, State House, Station 34, Augusta, ME 04333. Tel. 207-582-8707.

Maryland ▪ John A. Donaho, Insurance Commissioner, 501 St. Paul Pl., 7th Floor South, Baltimore, MD 21202. Tel. 301-333-2520; 800-492-6116.

Massachusetts ▪ Timothy Gailey, Commissioner of Insurance, 280 Friend St., Boston, MA 02114. Tel. 617-727-7189.

Michigan ▪ Dhiraj Shah, Acting Insurance Commissioner, 611 West Ottawa St., 2nd floor, Lansing, MI 48933. Tel. 517-373-9273.

Minnesota ▪ Michael A. Hatch, Commissioner of Commerce, 500 Metro Square Building, 5th Floor, St. Paul, MN 55101. Tel. 612-296-6848; 800-652-9747.

Mississippi* ▪ George Dale, Commissioner of Insurance, 1804 Walter Sillers Building, Jackson, MS 39201 (P.O. Box 79, Jackson, MS 39205). Tel. 601-359-3569.

Missouri ▪ Lew Melahn, Director of Insurance, 301 W. High St. 6 North, P.O. Box 690, Jefferson City, MO 65102-0690. Tel. 314-751-2451.

Montana* ▪ Andrea Bennett, Commissioner of Insurance, 126 North Sanders, Mitchell Building, Rm. 270, Helena, MT 59620 (P.O. Box 4009, Helena, MT 59604). Tel. 406-444-2040; 800-332-6148.

Nebraska ▪ William H. McCartney, Director of Insurance, Terminal Bldg., 941 O St., Suite 400, Lincoln, NE 68508. Tel. 402-471-2201.

Nevada ▪ David A. Gates, Commissioner of Insurance, Nye Building, 201 South Fall St., Carson City, NV 89710. Tel. 702-885-4270; 800-992-0900.

New Hampshire ▪ Louis E. Bergeron, Insurance Commissioner, 169 Manchester St., Concord, NH 03301. Tel. 603-271-2261; 800-852-3416.

New Jersey ▪ Kenneth D. Merin, Commissioner of Insurance, 20 West State St., Trenton, NJ 08625. Tel. 609-292-5363.

New Mexico ▪ Fabian Chavez, Superintendent of Insurance, Department of Insurance, P.O. Drawer 1269, Sante Fe, NM 87504-1269. Tel. 505-827-4500.

New York ▪ James P. Corcoran, Superintendent of Insurance, 160 W. Broadway, New York, NY 10013. Tel. 212-602-0429; 800-522-4370.

North Carolina* ▪ James E. Long, Commissioner of Insurance, Dobbs Building, P.O. Box 26387, Raleigh, NC 27611. Tel. 919-733-7349; 800-662-7777.

North Dakota* ▪ Earl R. Pomeroy, Commissioner of Insurance, Capitol Building, Fifth Floor, 600 East Blvd., Bismarck, ND 58505-0320. Tel. 701-224-2440; 800-247-0560.

Ohio ▪ George Fabe, Director of Insurance, 2100 Stella Court, Columbus, OH 43266-0566. Tel. 614-644-2658; 800-282-4658.

Oklahoma* ▪ Gerald Grimes, Insurance Commissioner, 1901 N. Walnut St., Oklahoma City, OK 73105. Tel. 405-521-2828.

Oregon ▪ Theodore R. Kulongoski, Insurance Commissioner, 21 Labor and Industries Bldg., Salem, OR 97310. Tel. 503-378-4271.

Pennsylvania ▪ Constance B. Foster, Insurance Commissioner, 1326 Strawberry Square, 13th Floor, Harrisburg, PA 17120. Tel. 717-787-5173.

Puerto Rico ▪ Miguel Villafane, Commissioner of Insurance, Fernandez Juncos Station, P.O. Box 8330, Santurce, PR 00910. Tel. 809-722-8686.

Rhode Island ▪ Robert J. Janes, Insurance Commissioner, 233 Richmond St., Providence, RI 02903-4233. Tel. 401-277-2246.

South Carolina ▪ John G. Richards, Chief Insurance Commissioner, 1612 Marion St., P.O. Box 100105, Columbia, SC 29202-3105. Tel. 803-737-6117.

South Dakota ▪ Mary Jane Cleary, Director of Insurance, Insurance Building, 910 E. Sioux Ave., Pierre, SD 57501. Tel. 605-773-3563.

Tennessee ▪ Elaine A. McReynolds, Commissioner of Insurance, 500 James Robertson Pkwy. 5th Floor, Nashville, TN 37243-0565. Tel. 615-741-2241; 800-342-4029.

Texas ▪ A. W. Pogue, Commissioner of Insurance, 1110 San Jacinto Blvd., Austin, TX 78701-1998. MC001-0. Tel. 512-463-6464.

Utah ▪ Harold C. Yancey, Commissioner of Insurance, 160 E. Third St., 300 South, Salt Lake City, UT 84111. Tel. 801-530-6400.

Vermont ▪ Gretchen Babcock, Commissioner of Insurance, State Office Building, 120 State St., Montpelier, VT 05602. Tel. 802-828-3301.

Virgin Islands ▪ Derek M. Hodge. Commissioner of Insurance, Kongens Gade #18, St. Thomas, VI 00801. Tel. 809-774-2991.

Virginia ▪ Steven T. Foster, Commissioner of Insurance, 700 Jefferson Building, Richmond, VA 23219 (P.O. Box 1157, Richmond, VA 23209). Tel. 804-786-3741; 800-552-7945.

Washington* ▪ Richard G. Marquardt, Insurance Commissioner, Insurance Building, AQ21, Olympia, WA 98504. Tel. 206-753-7301; 800-562-6900.

West Virginia ▪ Hanley Clark, Insurance Commissioner, 2019 Washington St., East, Charleston, WV 25305. Tel. 304-348-3394; 800-642-9004.

Wisconsin ▪ Robert D. Haase, Commissioner of Insurance, 123 W. Washington Ave., Madison, WI 53702. Tel. 608-266-0102.

Wyoming ▪ Gordon W. Taylor, Insurance Commissioner, Herschler Building, 122 W. 25th St., Cheyenne, WY 82002. Tel. 307-777-7401.

Insurance and Service Organizations

The following organizations are supported by insurance companies or have activities closely related to insurance. National and state organizations which subscribe to the services of the Insurance Information Institute are identified by an asterisk(*).

***ACORD** ▪ Robert Merriman, president, One North Broadway, White Plains, NY 10601. Tel. 914-682-0800. An industry-sponsored institute serving as the focal point for improving the computer processing of insurance transactions through the insurance agency system.

Alliance of American Insurers ▪ Franklin W. Nutter, president, 1501 Woodfield Rd., Suite 400 West, Schaumburg, IL 60173-4980. Tel. 708-330-8500. Trade association to facilitate cooperation among property and casualty insurance companies in matters of concern to them and their policyholders.

All-Industry Research Advisory Council ▪ Donald W. Segraves, executive director, 1200 Harger Rd., Suite 310, Oakbrook, IL 60521. Tel. 708-572-1177. Provides the public and the insurance industry with timely research information relevant to public policy issues affecting risk and insurance.

American Academy of Actuaries ▪ James J. Murphy, executive vice president, 1720 I St., NW, 7th Floor, Washington, DC 20006. Tel. 202-223-8196. Professional association for actuaries. Issues standards of conduct and provides government liaison and advisory opinions.

American Association of Crop Insurers ▪ E. Eugene Gantz, executive vice president, 2501 M St., NW, Washington, DC 20037. Tel. 202-463-0541. Trade association of insurance companies to promote crop insurance.

American Association of Insurance Services ▪ Paul A. Baiocchi, president and chief executive officer, 1035 S. York Rd., Bensenville, IL 60106. Tel. 708-595-3225. Rating, statistical, and advisory organization, principally of small and medium–sized property/casualty companies.

American Association of Managing General Agents ▪ Jerry Fogel, executive vice president, 9140 Ward Parkway, Kansas City, MO 64114. Tel. 816-444-3500. Membership association of managing general agents of insurers.

American Council of Life Insurance ▪ Richard S. Schweiker, president, 1001 Pennsylvania Ave., NW, Suite 500, Washington, DC 20004. Tel. 202-624-2000. Trade association responsible for the public relations, government, legislative and research aspects of the life insurance business.

***American Institute of Marine Underwriters** ▪ Ward L. Mauck, president, 14 Wall St., New York, NY 10005. Tel. 212-233-0550. Provides information of interest to marine underwriters and promotes their interests.

American Institute for Property and Liability Underwriters, Inc. ▪ Dr. Norman A. Baglini. CPCU, CLU, president, 720 Providence Rd., Malvern, PA 19355-0770. Tel. 215-644-2100. Developed the Chartered Property Casualty Underwriter (CPCU) professional designation program and administers national CPCU examinations.

American Insurance Association ▪ Robert E. Vagley, president, 1130 Connecticut Ave., NW, Suite 1000, Washington, DC 20036. Tel. 202-828-7100. Trade and service organization of the property and casualty insurance industry; provides a forum for the discussion of problems; provides safety, promotional and legislative services.

American Insurance Services Group, Inc. ▪ Lawrence M. Zippin, president, 85 John St., New York, NY 10038. Tel. 212-669-0400. Wholly owned subsidiary of the American Insurance Association, administers five industry service organizations, the Index System, Property Insurance Loss Register, Premium Audit Advisory Service, Property Claim Services and Engineering & Safety Service.

American Land Title Association ▪ James Maher, executive vice president, 1828 L St., NW, Suite 705, Washington, DC 20036. Tel. 202-296-3671. Trade organization for title insurers, abstractors and agents. Performs statistical research and lobbying services.

***American Nuclear Insurers** ▪ Burt C. Proom, president, The Exchange, Suite 245, 270 Farmington Ave., Farmington, CT 06032. Tel. 203-677-7305. A nonprofit unincorporated association through which liability and property insurance protection is provided against hazards arising out of nuclear reactor installations and their operations.

American Prepaid Legal Services Institute ▪ Alec M. Schwartz, executive director, 750 North Lake Shore Drive, Chicago, IL 60611. Tel. 312-988-5751. National membership organization to provide information and technical assistance to lawyers, insurance companies, administrators, marketers and consumers regarding group and prepaid legal service plans.

***Arbitration Forums, Inc.** ▪ Bernard L. Hines Jr., president, 200 White Plains Rd., Tarrytown, NY 10591-0066. Tel. 914-332-4770. A nonprofit corporation that arbitrates and mediates disputes over insurance-related matters.

***Association of Fire and Casualty Companies in Texas** ▪ D.E. Walker, executive manager, c/o Highlands Insurance Co., 600 Jefferson St., Houston, TX 77002. Tel. 713-659-5541. Represents domestic Texas property and liability insurance companies in seeking to broaden consumer knowledge of insurance and in supporting legislation to improve the insurance business.

***Automobile Insurance Plans Service Office** ▪ John J. Corbley, president, 302 Central Ave., Johnston, RI 02919-5095. Tel. 401-946-2310. Develops and files rates and provides other services for automobile insurance plans.

Casualty Actuarial Society ▪ Michael Fusco, president, One Penn Plaza, New York, NY 10119. Tel. 212-560-1018(9). Promotes actuarial and statistical science in all insurance fields except life.

***College of Insurance** ▪ Dr. Ellen Thrower, president and chief executive, 101 Murray St., New York, NY 10007. Tel. 212-962-4111. Insurance industry-supported college providing a curriculum leading to bachelor's and master's degrees in business administration, insurance, financial services, and actuarial science.

Conference of Insurance Legislators ▪ Charles Davis, executive director, P.O. Box 217, Brookfield, WI 53008. Tel. 414-782-6669. Organization of chairmen of state legislative committees concerned with insurance-related matters.

Crop Insurance Research Bureau ▪ Henry A. Butler, president, 3707 Woodview Trace, Box 68700, Indianapolis, IN 46268. Tel. 317-875-5250. Crop insurance trade organization.

Defense Research Institute, Inc. ▪ Louis Potter, executive director, 750 North Lake Shore Drive, Suite 500, Chicago, IL 60611. Tel. 312-944-0575. Service organization to improve the administration of justice and the skills of defense lawyers.

Federal Insurance Administration ▪ Harold T. Duryee, administrator, 500 C St., SW, Washington, DC 20472. Tel. 202-646-2781. Administers the federal flood insurance and crime insurance programs.

***Fire Prevention and Engineering Bureau of Texas** ▪ Richard A. Comstock, manager, 1431 Greenway Dr., Suite 520, Irving, TX 75038-2417. Tel. 214-580-0096. Performs risk inspections, prepares underwriting reports, inspects fire defenses of Texas cities for members and subscribers.

Foreign Credit Insurance Association ▪ John Hanson, president, 40 Rector St., 11th Floor, New York, NY 10006. Tel. 212-306-5000. Offers credit insurance facilities for U.S. exporters through cooperation of the insurance business and the Export-Import Bank of Washington.

Health Insurance Association of America ▪ Carl J. Schramm, president, 1025 Connecticut Ave., NW, Suite 1200, Washington, DC 20036. Tel. 202-223-7780. Central source of health insurance information for the public on behalf of insurance companies; monitors public attitudes and reactions to health insurance developments.

Highway Loss Data Institute ▪ Brian O'Neill, president, 1005 North Glebe Road, Arlington, VA 22201. Tel. 703-247-1600. Nonprofit organization to gather, process and provide the public with insurance data concerned with human and economic losses resulting from highway accidents.

ISO Commercial Risk Services, Inc. ▪ B. Joseph Shelley, president, 2 Sylvan Way, Parsippany, NJ 07054. Tel. 201-267-0359. A wholly-owned subsidiary of Insurance Services Office, Inc., providing individual property survey and rating information to the property/casualty industry.

ISO Telecommunications, Inc. ▪ Dominick R. Cortellessa, president, 160 Water St., New York, NY 10038. Tel. 212-487-5000. A wholly-owned subsidiary of Insurance Services Office, Inc., established to telecommunicate ISO products and services to ISO-participating insurers.

Independent Insurance Agents of America, Inc. ▪ Jeffrey M. Yates, executive vice president, 127 Payton Street, Alexandria, VA 23314. Tel. 703-683-4422. Trade association of independent insurance agents.

Independent Reinsurance Underwriters Association, Inc. ▪ J. Dale Bohm, executive director, 361 Main Street, Canton, GA 30114. Tel. 404-479-0265. Educational association to encourage the exchange of ideas among American reinsurers writing principally treaty reinsurance.

***Inland Marine Underwriters Association** ▪ James Mooney, president, 14 Wall St., New York, NY 10005. Tel. 212-233-7959. Forum for discussion of problems of common concern to inland marine insurers.

Institute for Civil Justice ▪ Dr. Kevin McCarthy, director, 1700 Main St., P.O. Box 2138, Santa Monica, CA 90406-2138. Tel. 213-393-0411. Organization formed within the Rand Corporation to perform independent, objective research and analysis concerning the civil justice system.

Insurance Accounting and Systems Association ▪ Elaine Powell, secretary-treasurer, P.O. Box 51340, Durham, NC 27717. Tel. 919-489-0991. An international organization to promote the study, research, and development of modern techniques in insurance accounting and statistics.

***Insurance Committee for Arson Control** ▪ Rick Gilman, executive director, 110 William St., New York, NY 10038. Tel 212-669-9245. All-industry coalition; serves as a catalyst for insurers' anti-arson efforts and a liaison with government agencies and other groups devoted to arson control.

***Insurance Crime Prevention Institute** ▪ Wendall C. Harness, director, 15 Franklin St., Westport, CT 06880. Tel. 203-226-6347. Serves property and casualty insurers in the investigation of fraudulent insurance claims, other than accident, health and workers compensation.

***Insurance Fund Foundation** ▪ Vance Fredrickson, president, 1501 Fourth Ave., Suite 1650, Seattle, WA 98101. Tel. 206-624-3928. Provides educational programs and materials to teachers, students and the general public.

Insurance Information Institute ▪ Mechlin D. Moore, president, 110 William St., New York, NY 10038. Tel. 212-669-9200. An educational, fact-finding, and communications organization for all lines of insurance except life and health insurance. It is supported by some 300 insurance companies and provides services on a subscribership basis to many major industry organizations.

Insurance Institute for Highway Safety ▪ Brian O'Neill, president, 1005 North Glebe Road, Arlington, VA 22201. Tel. 703-247-1500. Traffic safety organization supported by automobile insurers.

Insurance Institute of America, Inc. ▪ Dr. Norman A. Baglini, CPCU, CLU, president, 720 Providence Rd., Malvern, PA 19355-0770. Tel. 215-644-2100. Provides educational opportunities to property and liability insurance and related fields; provides standards for measurement of achievement through the administration of national examinations.

Insurance Library Association of Boston ▪ Barbara Thornton, president of the board, 156 State St., Boston, MA 02109. Tel. 617-227-2087. A nonprofit, independent membership library serving the research and education interests of all branches of the insurance industry.

Insurance Regulatory Examiners Society ▪ W. Bradford Connor, president, 6811 W. 63rd St., Suite 208, Overland Park, KS 66202. Tel. 913-831-0080. Professional and education association for examiners and other professionals working in insurance regulation.

***Insurance Services Office, Inc.** ▪ Fred R. Marcon, president, 175 Water St., New York, NY 10038. Tel. 212-487-5000. Provides a wide range of advisory, rating, actuarial, statistical and other services relating to property and casualty insurance, including the development of policy forms, rates, premiums, and related services for monoline and multiple line coverages. Offers services, including research studies, to insurers or other persons or organizations.

***Insurance Value Added Network Services** ▪ Robert Barham, president, 411 West Putnam Ave., Greenwich, CT 06830. Tel. 203-629-4826. An industry-sponsored organization offering a value added data communications network linking agencies, companies and providers of data to the insurance industry.

***International Insurance Council** ▪ Gordon Cloney, president, Suite 250, 1212 New York Ave., NW, Washington, DC 20005. Tel. 202-682-2345. Speaks for and coordinates the international noncommercial activities of U.S. insurance and reinsurance companies.

***Kansas Association of Property and Casualty Insurance Companies** ▪ L.M. Cornish, secretary-treasurer, 900 Merchants Tower, 8th and Jackson Streets, Topeka, KS 66612. Tel. 913-232-0545. Represents 17 domestic insurers in Kansas.

Kansas Insurance Education Foundation ▪ L.M. Cornish, secretary-treasurer, P.O. Box 1280, Topeka, KS 66601. Tel. 913-232-0545. Nonprofit organization devoted to promotion and encouragement of insurance education in Kansas. Develops teaching aids, supports insurance education at the university level, and prepares and distributes consumer information.

LOMA (Life Office Management Association) ▪ Lynn Merritt, president, 5770 Powers Ferry Rd., Atlanta, GA 30327. Tel. 404-951-1770. Worldwide association of insurance companies specializing in research and education, with a primary focus on home office management.

***Loss Executives Association** ▪ Herbert Hildebrand, president, c/o Colonial Penn Group, 4002 Eisenhower Blvd., Tampa, FL 33614. Tel. 813-886-4444. A professional association of property loss executives providing education to the industry.

***Metropolitan Chicago Loss Bureau** ▪ Robert Kissane, president, 343 S. Dearborn, Suite 1400, Chicago, IL 60604. Tel. 312-322-2500. Assists insurance companies with property claims adjustment and arson and fraud claims investigation.

National Association of Casualty and Surety Agents ▪ Martin Huber, acting executive vice president, 6931 Arlington Rd., Suite 308, Bethesda, MD 20814. Tel. 202-986-4166. A trade organization dedicated to safeguarding the public interest, preserving a competitive market, and working with others for the good of the insurance business and the public.

National Association of Casualty and Surety Executives ▪ Lawrence M. Zippin, executive director, 1130 Connecticut Ave., NW, Washington, DC 20036. Tel. 202-828-7100. Organization to provide insurance companies and agents with a forum for discussion of industry problems relating to the public's interest.

National Association of Health Underwriters ▪ William F. Flood, executive vice president, 1000 Connecticut Ave., NW, Suite 1111, Washington, DC 20006. Tel. 202-223-5533. Professional association of persons engaged in the sale and service of disability income and hospitalization and major medical health insurance.

National Association of Independent Insurers ▪ Lowell R. Beck, president, 2600 River Rd., Des Plaines, IL 60018. Tel. 708-297-7800. Trade association of fire, casualty and surety insurers.

National Association of Insurance Brokers, Inc. ▪ Barbara Haugen, acting executive director, 1401 New York Ave., NW, Suite 720, Washington, DC 20005. Tel. 202-628-6700. Trade association of commercial insurance brokers.

National Association of Insurance Commissioners ▪ Sandra L. Gilfillan, executive vice president, 12 Wyandotte Plaza, 120 W. 12th St., Suite 1100, Kansas City, MO 64105. Tel. 816-842-3600. Organization of state insurance commissioners to promote uniformity in state supervision of insurance matters, and to recommend legislation in the various state legislatures.

***National Association of Insurance Women** ▪ Nancy Utter, executive vice president, P.O. Box 4410, Tulsa, OK 74159. Tel. 918-744-5195. Fosters educational programs for members. Promotes public safety and service programs.

National Association of Mutual Insurance Companies ▪ Larry Forrester, president, 3707 Woodview Trace, P.O. Box 68700, Indianapolis, IN 46268. Tel. 317-875-5250. Trade association of property and casualty mutual insurance companies.

National Association of Professional Surplus Lines Offices, Ltd. ▪ Richard Bouhan, executive director, 5746 N. Broadway, P.O. Box 26660, Kansas City, MO 64118. Tel. 816-455-3210. Professional association of wholesale brokers, excess and surplus lines companies, affiliates and supporting members.

National Association of Surety Bond Producers ▪ Martin Huber, acting executive vice president, 6931 Arlington Rd., Suite 308, Bethesda, MD 20814. Tel. 301-986-4166. Trade association of surety bond producers.

National Automobile Theft Bureau ▪ Paul W. Gilliland, president, 10330 S. Roberts Rd. 3A, Palos Hills, IL 60465. Tel. 708-430-2430. Conducts stolen vehicle recovery and auto theft prevention activities.

National Committee on Insurance Guaranty Funds ▪ James E. Lane, executive director, 2600 River Rd., Des Plaines, IL 60018. Tel. 708-297-7800. Advisory organization to the state guaranty fund boards; gathers and disseminates information regarding insurer insolvencies.

***National Committee on Property Insurance** ▪ Eugene L. Lecomte, president, Ten Winthrop Sq., Boston, MA 02110. Tel. 617-423-4620. Provides advice and assistance to insurers writing property coverage in distressed or residual insurance markets.

***National Council on Compensation Insurance** ▪ Kevin M. Ryan, president, One Penn Plaza, 51st Floor, New York, NY 10119. Tel. 212-560-1000. Develops and administers rating plans and systems for workers' compensation insurance.

National Crop Insurance Services, Inc. ▪ Lloyd W. Lindstrom, president, 7301 College Blvd., Suite 170, Overland Park, KS 66210. Tel. 913-451-0980. National trade association of insurance companies writing hail insurance, fire insurance, and insurance against other weather perils to growing crops, with rating and research services for crop-hail and rain insurers.

National Fire Protection Association ▪ Robert W. Grant, president, One Batterymarch Park, Quincy, MA 02269-9101. Tel. 617-770-3000. Independent, nonprofit source of information on fire protection, prevention and suppression; develops and publishes consensus fire safety standards; sponsors national Learn Not to Burn campaign.

[redacted]y Council ▪ T.C. Gilchrest, president, 444 N. Michigan Ave., Chicago, IL 60611. Tel. 312-527-4800. Provides national support and leadership in the field of safety; publishes safety materials of all kinds; conducts a public information and publicity program in support of safety.

***New York Board of Fire Underwriters** ▪ Alexander Pirnie, president, 85 John St., New York, NY 10038. Tel. 212-227-3700. Supervises the Fire Patrol of New York City, conducts fire safety and electrical inspections, helps develop fire safety standards, and assists in the adjustment of fire insurance claims.

***New York Insurance Alliance** ▪ Kurt J. English, CPCU, CLU, CAE, president, 716 Seventh North St., Liverpool, NY 13088. Tel. 315-451-7412. A trade association servicing the property/casualty insurance industry in New York State.

***New York Property Insurance Underwriting Association** ▪ Richard G. Brueckner, president, 100 William St., New York, NY 10038. Tel. 212-208-9700. Provides basic fire insurance for New York State residents not able to obtain the coverage through the voluntary market.

Overseas Private Investment Corporation ▪ Ambassador Fred Zeder, president, 1615 M St., NW, Washington, DC 20527. Tel. 202-457-7200. Self-sustaining U.S. government agency providing political risk insurance and finance services for U.S. investment in developing countries.

Professional Insurance Agents ▪ Donald K. Gardiner, executive vice president, 400 N. Washington St., Alexandria, VA 22314. Tel. 703-836-9340. Trade association of independent insurance agents.

Property Insurance Loss Register ▪ Gerald F. Murphy, vice president, 700 New Brunswick Ave., Rahway, NJ 07065. Tel. 201-388-0157. A voluntary, nonprofit organization administered by the American Insurance Services Group, Inc.; maintains a computerized registry of property loss claims which can be used by its subscribers to fight insurance fraud, and provides data for nonactuarial/statistical research.

Property Insurance Plans Service Office ▪ Eugene L. Lecomte, president, Ten Winthrop Sq., Boston, MA 02110. Tel. 617-423-4620. Provides technical and administrative services to state property insurance plans.

Public Risk Management Association ▪ R. Bradley Johnson, executive director, 1117 North 19th Street, Suite 900, Arlington, VA 22209. Tel. 703-528-7701. Membership organization representing risk managers in state and local public entities.

Reinsurance Association of America ▪ Andre Maisonpierre, president, 1819 L St., NW, 7th Floor, Washington, DC 20036. Tel. 202-293-3335. Trade association of property and casualty reinsurers; provides legislative services for members.

Risk and Insurance Management Society, Inc. ▪ Ron E. Judd, executive director, 205 E. 42nd St., New York, NY 10017. Tel. 212-286-9292. Organization of corporate buyers of insurance which makes known to insurers the insurance needs of business and industry, supports loss prevention, and provides a forum for the discussion of common objectives and problems.

Society of Certified Insurance Counselors ▪ William T. Hold, Ph.D., CIC, CPCU, CLU, president, 3630 North Hills Dr., Austin, TX 78731. Tel. 512-345-7932. National education program in property, liability and life insurance, with a continuing education requirement upon designation.

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